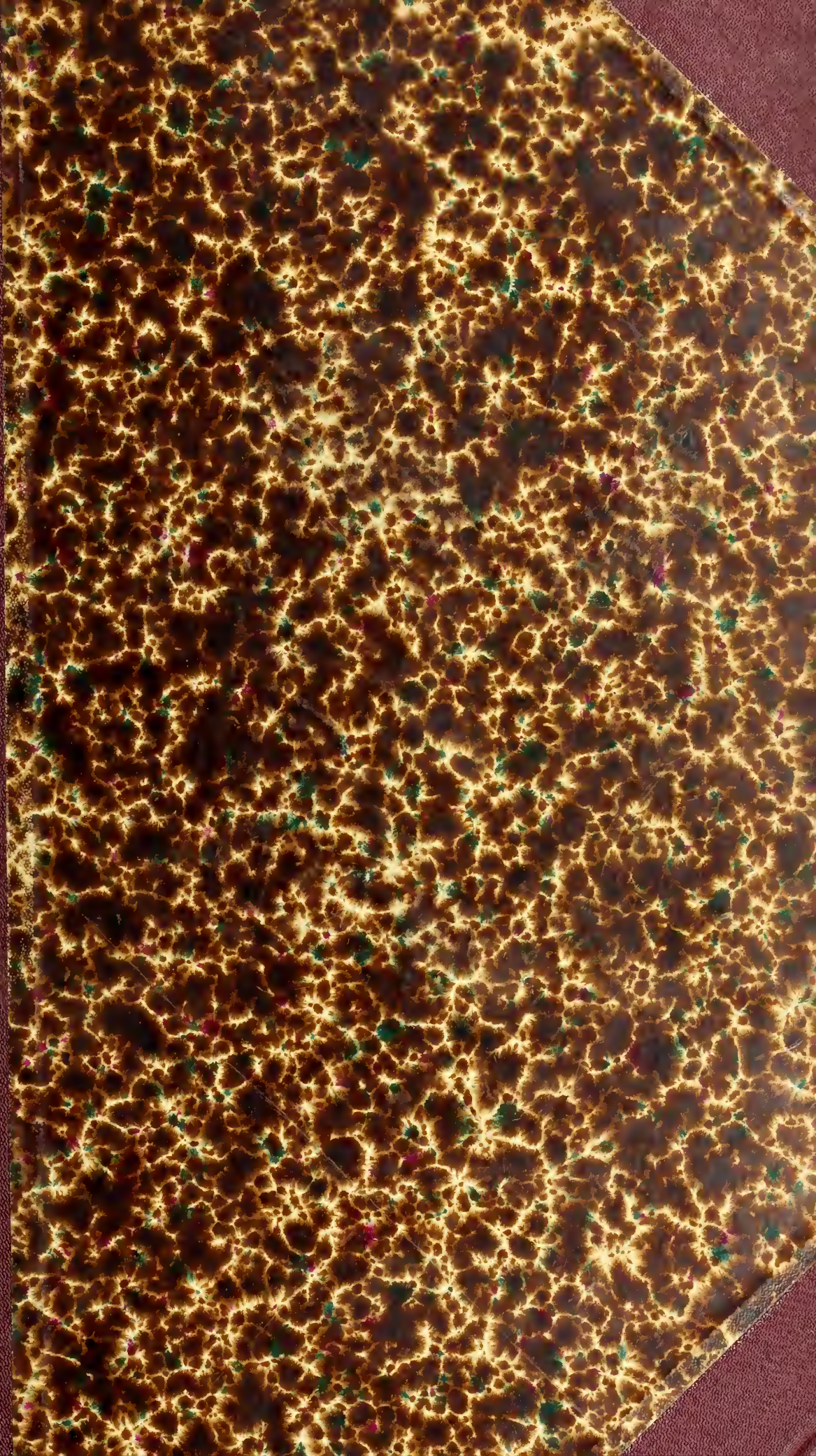
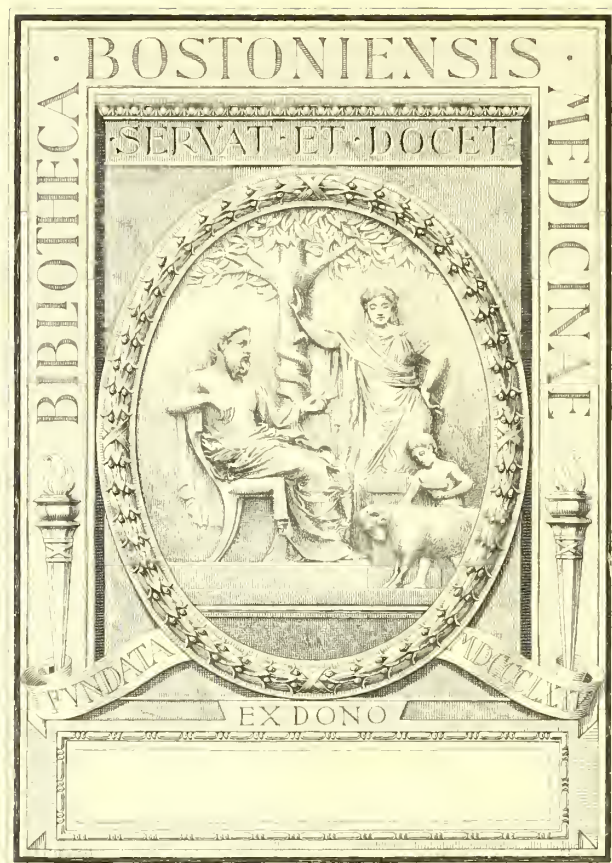


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JANUARY, 1904.

EDITORIAL NOTES.

The JOURNAL is more than glad to felicitate every member of the Society upon the completion of its first year of life, and to extend to **A NEW YEAR.** all its heartiest good wishes for a still more profitable New Year. From a mere child in long clothes, the Society has grown in one year to a pretty vigorous youth, representing the potential strength of something over one-half of the eligible physicians of the State. Its growth has been phenomenal and is increasing with marvelous rapidity. The last issue of the JOURNAL was several hundred copies larger than ever before, yet the additions to the list of members from the time the order was given to the time the JOURNAL was mailed were so many as to practically exhaust the December issue. Since the 1st of September nine county societies have been organized, with a total membership of 152. And it is not so much the actual as the relative membership, for these county societies have enrolled about four-fifths of the eligible physicians in their districts. That is good solid progress. The Register of Physicians has been issued and is a pretty good book. It will be issued every year, by the Society, and with the co-operation of county society secretaries can be made even more accurate than the present volume. We are considering the addition of physicians of Oregon and Washington, and making the Register a Tri-State Register. What do you think of the idea? The compliments of the season have been earned; we hope they will be even more deserved this time next year.

The editor has attended several meetings for the organization of county societies, and has been struck by one thing more particularly than any other—the desire of the physicians who get together to form such societies to omit the long, tiresome papers compiled from text books or journals, and to confine the work of the society meetings to short, pithy papers or reports that deal with practical questions and actual experiences. That is just what we all really need. Some men seem to have the diabolic faculty of putting together a mass of stuff making a paper of great length which is painful to even read for the printer, when everything that they had to say could have been said in one-tenth of the space. No one cares for such dissertations, for as a rule they contain mighty little real meat and a whole lot of fat and sinew. Mere length does not necessarily mean real merit. The JOURNAL is going to try to leave out these long papers of the sort indicated, and to keep its pages for papers of genuine worth of the practical sort, or papers that have sufficient merit to justify their length. All papers read at county society meetings should be sent to the publication office of the Society. If they are good, they will be published; if they are not, they *should not* be published. We cannot guarantee to publish every paper sent in, but if you will see to it that all papers read are sent to us, we shall certainly keep you well supplied with pretty good food for mental digestion. Start the new year right by acting upon this suggestion, and then size up the JOURNAL on the completion of Volume 11.

On December 7th, before the Supreme Court sitting in bank, was called the case, *ex parte* Gerino, *habeas corpus*. For

SUITS AGAINST THE EXAMINERS. Gerino appeared ex-judge Garoutte, and in defense of the statute Mr. Charles Wheeler made the argument upon the briefs prepared by attorneys Tait and McGuire. The contention of Mr. Garoutte was that the law regulating the practice of medicine was unconstitutional, for the reasons that (1) representation upon the Board was unfair and special legislation, the regular school having five members and the other schools but two each. And (2), that the clause in Sec. 5 of the act (as printed on page 181 of the Register), beginning "Said Board may, in its discretion accept and register * * * without examination," etc., is class legislation and allows the Board to discriminate against an individual. To the first contention the reply was made that all governments had found the necessity to legally restrain and confine the practice of medicine to those who are properly qualified; that such regulation is a police measure; that the carrying out

of the law is a duty and not a special privilege, and that the Legislature had the right to delegate its power of appointment to such persons, associations and corporations as it saw fit. That the personnel of the Board might be composed entirely of members of but one school, and that any one of the three, or of any proportion of these three schools. Numerous decisions on the point, from cases in other states, were cited. To the second point the answer made was that the Examiners are public officials and sworn to do their duty impartially; and that the clause allowing the Board to register without examination Dr. A., and refuse to register without examination Dr. B., both from the same State and having the same credentials, is exactly identical with a similar clause in the Code governing the admittance of lawyers to practice law, in which the discretionary right to admit without examination, or to require an examination, at its pleasure, is vested in the Supreme Court, in dealing with those who enter this State to practice law, having been admitted to the bar of another State. Mr. Hodghead, attorney for a regular medical school located in San Francisco, which is also suing the Board on a question of the constitutionality of the act, appeared and asked to file a brief in the present suit, as some points had been raised which were involved in the suit already pending in the lower court. The Court allowed ten days for the attorneys on both sides to file amended briefs.

About 2250 B. C., Hammurabi, King of Babylonia, established certain laws which he embodied into a code, inscribed upon stone **NEW LAWS** stelæ, and set up in the principal **OR OLD?** cities of his domain. We are rather inclined to look upon medical legislation as somewhat modern; that is because we do not know any better. In Hammurabi's time, medicine was specialized; surgery was a distinct branch of the science; quacks and pretenders were known and legislated against. From advance sheets of a translation of these laws by Prof. Harper, President of the University of Chicago, we read: "If a physician operates on a man (*please note that the physician did not 'operate a case' in Hammurabi's time!!*) for a severe wound with a bronze lancet and saves the man's life, or if he opens an abscess (in the eye) of a man with a bronze lancet, and saves that man's eye, he shall receive ten shekels of silver (as his fee)." But, under the same circumstances, if he causes the man's death, or destroys the man's eye, "they shall cut off his fingers." That would tend to discourage unskilled operators and experimental operations. In 1508 the Royal College of Surgeons was authorized by charter to examine those who would practice medicine and physic, and to

issue license to those who were found qualified. This would not have been done had it not been found necessary, nor would Hammurabi, 4154 years ago, have had need to discourage quacks, had they not existed. Yet, in this year of grace 1904, there come those who practice medicine and physic, and they stand before the highest court in the State, in the persons of their attorneys, and say they prefer to have no law governing the practice of medicine. This is indeed a progressive age, when educated men will strive to put the commonwealth back of the time of Babylonia; to make us lose what has been gained in 4154 years!

One of our youngest component societies—Merced County Medical Society—discussed, at its first meeting, one of the most **A VITAL** vital questions in the whole range **QUESTION.** of medicine: The status and abuse of the secret proprietary preparation. This involves the right of the physician to imperil the life of his trusting patient by giving him, as medicine, stuff, the composition of which no one knows save the unlicensed maker. At a recent annual meeting of the state society of an Eastern State, the President, in his address, deplored the fact that drugstore prescription files disclosed the fact that nearly one-half the physicians, who should know better, were either writing for out-and-out nostrums, or for the nearly as bad proprietary mixture, of which the exact composition is unknown. "Why cannot physicians write their own prescriptions?" Why, indeed! Why should they, who, in many cases, refuse to wear ready-made clothing, prescribe misfit ready-made medicine of unknown composition? That question is consigned, by most people, to the same category as the query as to the composition of Frankfurters. Yet the solution of the former question is far less difficult than that of the latter. The reason is that the manufacturer of this stuff possesses no circulating medium other than monetary, and no heart save one branded and patterned with dollar and cent marks. Also, he is a wily business man, and he has hundreds of tricky and unscrupulous ways of using the medical profession as an advertising bureau, and of prostituting physicians to his own nefarious ends. The only glimmer of hope comes from a recognition of the truth of Lincoln's statement that "you cannot fool all the people all the time." The subject is suggested as a profitable one for other county societies to discuss. A safe rule to follow is to solely prescribe perfectly known drugs and medicines; and if a manufacturer declines to advertise the ingredients or the formula of his preparations, conscientious physicians can do nothing less than refuse to prescribe them.

Last month the JOURNAL published a short note on the correspondence relative to the claim of lack of proper recognition of his aid by Mr. J. C. Smith, of New Orleans. The whole matter is rather muddled, but it appears that there was an effort made by one or two men connected with the Yellow Fever Institute of the P. H. and M. H. Service to omit any recognition of Mr. Smith in their published report. This should not be regarded as a slight upon the Service, for a better body of men does not exist than the gentlemen of this Service. But now the question is still more muddled, for Dr. Carrol has stated his belief that the organism found by the Institute, and claimed by Mr. Smith as his very own, is really nothing more nor less than a yeast organism, and has nothing to do with the causation of yellow fever. If that be the case, what becomes of the contention of Mr. Smith, and should he then have just ground for complaint, or should Working Party No. 1 abuse him for being led astray by the Smith false gods? Or should Working Party No. 1 first apologize to Mr. Smith, and then Mr. Smith offer his excuses to Working Party No. 1? In either event, what causes yellow fever? And further, what is the poor muddled critic to say? It is to be hoped that all connected will immediately become very busy and clear things up a little.

CONSTITUTION AND BY-LAWS.

A very important portion of the proposed Constitution is that contained in Article III, Section 5, published last month and to be found on page 417, December JOURNAL. The adoption of this section will mean that all "members at large" and "permanent" members will have to join a component county society within one year. It is simply carrying out in full the spirit of reorganization. The State Society is to be made up of those who compose the various county societies, and is, in fact, to be an association of county societies. The Board of Trustees, acting under instructions from the House of Delegates at the last meeting, has referred this matter to an attorney and has received his opinion as to the legality of the step proposed. In the attorney's opinion the Society has the legal right to adopt this section and thus compel its members to become members of component societies, if they do not already hold such membership. There can be no special legislation, so this ruling must apply to permanent members. At the present time, however, there are but four members of this class who are not also members of county societies. It is hardly fair to the other 1,400 to hold up the matter of organization simply on account of four.

Another section in question is Section 6, Article I of the By-Laws, printed on page 418, in the last issue. This section introduces honorary members. Shall there be any such? Is not an honorary membership a purely empty honor? We have no members of this class, at the present time, and it is not likely that we will have. Is it not better to leave out this section, and to have no members at all save those who are members of county societies? This section is taken from the present By-Laws and is given in the draft suggested, not because the committee thinks it desirable to retain the provision, but because some members may have further ideas on the subject.

Under the present Constitution and By-Laws the Trustees fix the amount of the annual assessment upon county societies. The suggested document places that duty upon the House of Delegates. The probable expenses for any year may be approximately estimated by the Council at the time of the annual meeting, and the House of Delegates be advised of the estimated budget. The Delegates can then fix the amount which they are to assess their county societies.

Article V, dealing with the Council, is an exceedingly important one and has been given long and careful consideration. The publications of the Society have grown, even in one year, to be a large and important business. They can be built up far beyond their present status, and without cost to the Society. But all this means a vast increase in the amount of business detail, and the present arrangement for transacting such business is not at all convenient. It would be satisfactory if the Society was not doing any more than it has in past years, but the JOURNAL and the Register are by no means small undertakings. The growth of the JOURNAL and the added work entailed by the publication of the Register have caused a great deal of work to pass through the publication office. In addition to the regular work attached to the publications the Editor has been asked to energetically prosecute the work of organization of county societies, and necessarily that entails more detail. As a result, all of the petty cash transactions are settled from the JOURNAL income, and must subsequently be adjusted by the cumbersome process of, (1) a resolution of the Trustees, (2) notice to the Secretary, (3) a warrant drawn by the Secretary, which is (4) then sent to Los Angeles for the signature of the President, and then (5) forwarded to the Treasurer. At the lowest, this consumes ten days. A large business cannot well be built up or maintained on such a cumbersome foundation. Consequently, in the document submitted, all the business of the publication office is placed in the hands of an Editor (under bonds) and would be protected by a system of vouchers and warrants, under the supervision of an auditing committee

of the Council. The committee has assumed that it is the desire of every member of the Society to build up as good and as fine a JOURNAL as it is possible to secure, and to compile and publish each year as nearly perfect a Register and Directory as may be. To secure these results the whole work is placed in the publication office, in charge of a regularly employed Editor who is responsible to the Council's auditing committee. The Publication Committee is done away with. At present, the Publication Committee is supposed to be in full charge of all publications; yet it has no authority to spend, and no control over, any money. The Trustees are supposed to provide ways and means for the Publication Committee, yet they have no control of the publications. The existing state of things cannot be changed before April, when it will be up to the House of Delegates to say whether a less archaic business system shall be in order, and whether the enlargement and improvement of the publications shall go on. Some of the Trustees, the editor and the business manager have been going over figures and discussing the situation, and they feel pretty sure that the JOURNAL can soon be made a semi-monthly, and later a weekly journal. This cannot be done, however, unless the whole matter is placed on a good sound business basis. Read carefully sections 1, 3 and 7, of Article V of the By-Laws, for they cover this question. If they are adopted, it will mean that the publication office will collect and account for its own earnings, and pay its own bills, without reference to the Treasurer of the Society. It will place the publication office in the same relation to the State Society as is the office of the American Medical Association *Journal* to the A. M. A.

Another point in the portion of the By-Laws printed this month is the question of Councilor Districts. The number of Councilors is fixed at twelve, in order to permit of having nine districts and three Councilors at large. The term of service being three years, it is necessary to have such a number of Councilor Districts as will be a multiple of three. The present system is to elect the Trustees from congressional districts. The objections to this are that there are but eight congressional districts, and that the number may be changed from time to time, in which case we should have to alter our By-Laws. The arrangement of Councilor Districts given in section 8 is temporary and will hold only until the Councilors are elected and arrange the Districts, as provided in Section 5, Article V. The arrangement suggested is one made after careful consideration of geographical distribution, and membership representation. This will be apparent upon consulting a map of the State. For instance; 1, San Diego, Riverside, Orange and San Bernardino, naturally fall into one district; Santa Barbara, San Luis

Obispo and Monterey are along the line of the coast division and fall into a natural district.

Section 7 permits the Council to transact its business by mail. This is the method by which the present committee for the revision of the U. S. Pharmacopeia transacts its immense amount of business, and it has been found perfectly satisfactory. Each member votes on every question raised, after he has received all the information which he may request, and his vote is then recorded. As soon as sufficient votes are recorded to either pass or defeat the matter in question, such information is sent out by the Secretary and the result is recorded. It is believed that this plan will be found satisfactory and will effect a great saving in the time of the members, and in money to a number of them. The present Board of Trustees has had fourteen meetings, and many of the members have come from a distance to attend them, thus losing both time and money by so doing. Pretty much all of the business transacted at these meetings could have been done quite as well by mail, in the manner suggested. There are now several questions to be decided, which will necessitate another meeting of the Board, probably before this goes to press, and they could be as well settled by mail.

EXAMINATIONS FOR LICENSE.

The general results of the last examination held by the State Board of Medical Examiners, in this city, on the 2nd, 3rd and 4th of December, are of interest, and some comments and suggestions by the Board demand attention.

At this examination there were 68 applicants, representing men from colleges all over the United States. Four men were over 50 years of age, and of these two were over 60; but the majority of the candidates was in the neighborhood of 30 years. Of the 68, 45 passed, 17 failed, and 6 were conditioned, making the total percentage of those who were not licensed practically 34, and this is close to the usual average of previous examinations.

In pathology the candidates were weak in describing gross specimens and in interpreting radiograms. A radiogram of the leg bones was mistaken for the femur by one man and for the humerus by another. Another candidate considered that a specimen of the bladder, ureters and kidneys was one of the uterus, tubes and ovaries. These, of course, are extreme instances, but are not the less important because of that.

Bacteriology was poor, and errors were made in the recognition of typical stainings, the specimens having been selected from the cabinet of a practitioner, not a member of the Board.

Medicine was better, but was not up to a satisfactory standard for a subject of such importance.

In obstetrics, surgery and materia medica the showings were good, as they were, too, in physiology, the questions in the last subject having been very easy.

The Board comments on the fact that most of the candidates wore badges or insignia of schools, colleges or secret societies, and some wore more than one of these. It is an effort to attract the attention of the Examiners and to obviate the action of that clause of the medical law which arranges for an impersonal examination. The Board objects to the practice, and candidates should know this, and should understand that the act is detrimental, rather than otherwise, to their chances. No candidate will herald the fact that he comes from a mediocre school, and one from a school of the highest standard may be thought to ask for the most rigid of tests. The badges of secret societies may be equally unfortunate, for the number of members is insignificant compared with the number of non-members, and the attempt to evade the law indirectly and establish a special association may result in an unconscious rigor on the part of the Examiners.

In this connection the Examiners call attention to the practice of candidates coming to call and presenting cards of introduction *before the examination*. It is a mistake committed by many practitioners in the State—the giving of such cards to prospective candidates, introducing them to individual members of the Board. It is almost tantamount to saying, "This man is a friend of mine, and I want you to know him and that—." It may easily embarrass an examiner. In the effort to allow for the influence of the knowledge that a certain candidate has influential friends the examiner may be stricter in his marking than he otherwise would be. The only introduction a candidate can possibly need is to the Secretary of the Board, who is not an examiner.

The medical law is working well, and can be made to work better; the profession must individually and collectively hold up the hands of the Examiners, and must frown down even these little means of evading any of the intentions of the act.

THE BUSINESS OFFICE.

While it was not the purpose of the State Medical Society in starting the JOURNAL to make of it a revenue producer, it was hoped, nevertheless, to place it eventually upon a self-sustaining basis. That hope has almost been realized, and that upon the completion of but its first year of existence. To those unfamiliar with the business of publishing, this result may not appear to be an unusual achievement, but to those who are in the business the success attained will be regarded as little short of phenomenal. There are an almost innumerable number of monthly publications much older in

years than the STATE JOURNAL that are being produced with the profit and loss balance very much on the wrong side of the ledger, and there is doubtless a large proportion of the State medical journals issued at a very considerable expense to the societies.

A unique combination of circumstances has made the publication of this JOURNAL possible at a comparatively small outlay.

Every one, however, connected with the JOURNAL, including the printing-house, has striven to make its appearance commensurate to the high character of its contents, and in that respect the JOURNAL takes no second place. But, after all, the credit for success is largely due to the advertisers. From the first the STATE JOURNAL was recognized as being most valuable as an advertising medium; and the steady increase from a page or two for a start to the 20 pages in this issue, attests the estimation with which it is regarded by those who seek the surest means for reaching the leading physicians of the Coast. Several advertisers have notified the publication office that sales have been made directly traceable to their advertisements in the STATE JOURNAL, and the constantly growing number of sanitariums, hospitals and resorts, colleges and schools—in fact, the various enterprises and institutions represented in the advertising pages—conclusively proves that their value is being more and more generally recognized and appreciated. The stand taken that only ethical matter could find place in the advertising pages has been productive of the best results, and proves that decent advertising is not only possible, but is profitable in the end to the medical journal that refuses to contaminate its pages.

CITY AND COUNTY HOSPITAL SITE.

The movement is well started to retain the present site of the City and County Hospital in San Francisco as the place for the erection of the new buildings. On the 6th of November Dr. Vincent P. Buckley, the chairman of the Hospital Committee of the Board of Health, introduced a resolution, which was unanimously adopted, rescinding the action previously taken in recommending the Almshouse tract. Concurrent with this, another resolution, which was also adopted unanimously, recommended to the Supervisors the site of the old hospital as "the most suitable for the new buildings." This opens the question fairly, and now two points come up for settlement. Can the money gotten from the sale of bonds, which were voted for the building of a hospital on the Almshouse tract, be used for the building of one on the old site? This question must not be lost sight of, and should be settled at the very begin-

ning. The next point is, will the residents of the Mission withdraw their objection to having the hospital remain with them? The JOURNAL in November pointed out that even if a new hospital be built on the Alms house tract, the Mission site will have to be kept as a hospital site by the city, and Dr. Buckley states that with the City and County Hospital out in the country, two emergency hospitals would be needed in the Mission. These facts must have some weight with the Mission Improvement Clubs, which will be the organizations to agitate and, to a great extent, to settle this point.

Surely of equal importance to this action of the Board of Health is that of the Merchants' Association. The *Merchants' Association Review* for December says:

Since San Francisco voted to issue bonds for the construction of a new City and County Hospital there have been numerous complaints about the proposed site. Persons interested in providing the best accommodation for the sick poor declare the site in the Alms house tract is a bleak, foggy and inaccessible region, to which no well man ought to be consigned, to say nothing of persons needing medical treatment, and rather than locate the hospital there, the Supervisors would better submit the question to a new vote, if that should be found legally necessary. In order to obtain a trustworthy opinion the Merchants'

Association has referred the matter to the leading physicians of the city, and has taken a poll of a large part of the medical fraternity. This vote utterly condemns the Alms house tract as a hospital site, standing at present at 246 against it, and only 53 in its favor—almost five to one. In addition to the votes, the association has received nearly 100 letters from physicians, most of which are strongly against moving the institution from its present location.

The Merchants' Association, an independent voluntary organization, having, as its history shows, the best interests of the whole city in view, and not only the interests of to-day, but the prospective interests of the future as well, is a most powerful and practical champion for the welfare of the class of the people who have to go to the city's hospitals. It can do much more than the Board of Health, or the Board of Supervisors, or any newspaper in shaping public opinion, for it has a very catholic representation of the public in its organization, and each member may easily become an efficient missionary. The medical practitioners, too, must act, and the idea that property can be injured by the proximity of a modern hospital must be combated.

Altogether the JOURNAL is pleased with the progress in opening the question, and will report and comment on the evolution of the matter.

CASES OF TUBERCULOSIS OF THE GENITO-URINARY TRACT, WITH REMARKS.*

By GEORGE CHISMORE, M. D., San Francisco.

IMPROVED methods of diagnosis, together with a clearer recognition of clinical symptoms, have brought us to the conclusion that tuberculosis of the genito-urinary tract is far more frequently encountered than was formerly believed; that such cases are always prolonged in duration, rebellious to treatment, and grave in character. Can they, or any of them, end in recovery? For one, the writer believes this possible. How often do we see some aged person bearing the incontestible evidence of having had a tubercular hip or knee-joint in childhood. Is there any just ground for supposing that so happy a termination may not be possible in some of the tubercular lesions of the genito-urinary tract? From our present point of view, it is too soon to satisfactorily determine this point; years must elapse before it will be finally settled, for the observations covering an adequate number of cases over a *sufficient length of time* are not yet at hand.

The two great camps of the profession—those who believe in prompt surgical interference and those who rely on general measures alone—have each published statistics of results, but both are open to that great source of error—premature claims for cures. I have known a case of tubercular epididymitis operated upon and all suspicious

indurations removed and the result pronounced a "cure." Within two years thereafter this patient died of a tubercular ulcer perforating the intestine. Is it too much to assert that the surgeon's knife may possibly, in such cases, transform a local into a general infection?

As a slight contribution to the knowledge upon which final conclusions must rest, I have ventured to bring before you a few cases that have been under my care for a considerable period of time, and of which I am able to state the present condition. They are very imperfect; but, as they represent some very different types and seem at least to show that it is possible for a person afflicted with undoubted tuberculosis of the genito-urinary tract to live for years a useful life without surgical attempts to remove the infected organs, I have thought them worthy of notice. The exciting causes in Cases Nos. I, II and IV appear to have been traumatic falls and muscular strains; the heredity was not at all marked. In case No. I, in which there was no tubercular tendency in the patient's ancestry, it seems worth mention that one of his children—his daughter—married a man who had had tubercular epididymitis, for which he had been curetted a year before with apparent recovery. He died within a twelvemonth of tubercular perforation of the intestine, verified by autopsy, and his widow soon after began to void urine frequently. I saw her in consultation and was able to prevent all local treatment, even

* Read before the American Society of Genito-Urinary Surgeons, Washington, D. C., May, 1903.

catheterization; tubercle bacilli were found in her urine, proved by culture, at times for several months; but she suffered only from the frequency. Her general health was not impaired. After two years she married again and is now in good health, and has a remarkably strong, healthy boy, a year old. No. III followed La Grippe, and No. V was preceded by a stricture.

Frequency of micturition was the marked feature in the early symptoms of Cases Nos. I, III, V and VI, in all of which the kidney or bladder, or both, were involved. In others the disease appeared to be limited to the scrotal contents, and this symptom was not present so long as urethra was not invaded by instruments or irritants. In Case I micturition was *never* painful to the patient, and he was never sounded, cryscoscoped or washed out. In Cases III and V voiding the urine was very painful and each local treatment or exploration greatly aggravated that symptom. Observations like this have led me to abstain from all local measures that are not imperatively demanded in cases of suspected tuberculosis of the genito-urinary tract, and, to my mind, this explains the fact that the prostate gland has been so seldom affected in the course of the cases that have come under my observation. The wooden feeling of a tubercular mass in the scrotum makes diagnosis in such cases easy, but it is often a weary wait before the tubercle bacillus can be found where the malady is restricted to the deeper structures. The pale, turbid, pus-laden urine, of light specific gravity, and the persistent character of the disease appear to be symptoms to awaken suspicion of tuberculosis, when coupled with frequent micturition without demonstrable cause.

TREATMENT.

I have but little to offer in regard to treatment, regarding it as *wholly expectant*.

The patient or his sponsor is frankly told that the course of his malady will be very long; that an outdoor life, regular habits, avoidance of exposure and fatigue, sensible exercise, active or passive, will do more for him than medication. There will be times when his doctor can prescribe with benefit, and alteratives, anodynes and tonics, play their part. Cod liver oil in full doses and long continued is, I am sure, beneficial; in those of my patients who were anemic, massage has seemed of service; in short, the attempt is made to put the patient in the best form compatible with his surroundings.

Because I believe that surgery and all local treatment are bad for him, I warn him strongly against it. Because I firmly believe he has a good chance to get well under this plan, I make my utmost effort to make him believe it also. Fortunately, like all cases of tuberculosis, it is easy to inspire such patients with hope.

Case 1.—I. M. S., aged 55, American, married, manufacturer. Came under my care January 1, 1892, on account of frequent, but painless micturition and the turbid condition of his urine. No previous treatment. Family history negative. Several months previous, being in his usual good health, he fell through the hatchway of a ship, hurting his left side over the kidney. Soon after he began to suffer with a "dull drawing pain" in the left lumbar region and along the course of the left ureter; at the same time he began to pass urine more frequently, and he noted it was no longer clear and that it had a disagreeable odor. He lost weight rapidly, and found his capacity for work greatly impaired. At times the pain was quite acute, but for the most part it was "only wearing." He was at the head of a very large concern; a man of great ability, the most intense activity, and of cheerful, hopeful temperament. Tuberculosis of the injured kidney was suspected, and an examination of the urine gave 1420 c. c. for the 24 hours voided in 17 times. It was pale, turbid, offensive in odor, neutral, sp. gr. 1013. It contained a trace of albumen, 21.63 gms. urea, much sediment, a few blood and many pus corpuscles; no casts; no tubercle bacilli were found, nor indeed in a great number of subsequent examinations for a very long time thereafter. No local treatment was adopted, nor any instrumental examinations made, as I felt sure of the tubercular nature of the case.

He gradually grew worse and weaker, and was forced—very reluctantly—to diminish his labor greatly. The micturition *remained painless*, but increased in frequency, until February 5, 1894, it is recorded at 43 times during the 24 hours, and was, he believed, at times oftener than this. In the summer of 1893 he called my attention to a hard, wooden mass in the left epididymis, which he declares was subject to great fluctuations in size, although not painful. Several other similar lumps soon appeared in the epididymis and cord, and he grew so much weaker that he spent the most of his time in bed. One of the masses underwent suppuration and broke externally—or rather, after the parts were thinned and almost broken, I tapped it with a small incision, taking care not to go beyond the limits of tubercular infiltration. Prof. D. W. Montgomery examined the discharge from the abscess and "found so many tubercle bacilli present that there cannot be doubt of the nature of his affection." Although the course of this complication has been marked by but little local pain, it was very indolent and prone to recurrence. Hydrocele appeared to a moderate degree and was drawn through a puncture from time to time, always taking care to avoid the tubercular deposits. For several months the sinus opened and closed, the induration slowly diminishing, until at last, after nearly a year, a putty-like mass was pushed out and the abscess healed soundly. During this period the frequency of micturition began to diminish; he gained flesh and strength and got about and at work again.

On June 19, 1895 he voided urine 18 times in 24 hours. It was now very easy to find tubercle bacilli in the urine. The pain in the lumbar region had gone, nor has it since returned. In August, 1895, he went to Japan on very important business, and I accompanied him. At first the voyage seemed to do him good, but later frequency increased, and for the first time he began to complain of weight and pain in the perineum. There was also some rise of temperature and occasional rigors. Soon a swelling appeared behind the bulb in the perineum, and on September 27, 1895, after having 48 hours previously divided the sound tissue, I laid open the inflamed mass; a few drops of pus escaped and the urine passed freely by the wound to the amount of one-third

of the whole quantity voided. After this he gained rapidly, although the wound was several months in closing. Since early in 1896 he has fully resumed his occupations, and now declares that he never felt better in his life.

An examination made April 25, 1898: General appearance excellent. Heavier than ever before. "Working hard." Slight indurated mass in left epididymis, also in right. Perineum soundly healed. Prostate gland normal to the touch. Has no pain. Excellent appetite. Sleeps well. Sexual powers normal.

Analysis of urine, same date: Total quantity of 24 hours 1550 cc., voided in 12 times, pale yellow, translucent, odorless, acid, sp. gr. 1011. Trace of albumin. Urea 18.65 gms. Pus corpuscles plentiful; few blood. Tubercle bacilli present. In a note he says he is of the opinion that his average is not more than 10 voidings in the 24 hours.

April 25, 1902: This patient continues in excellent health and has remained well since the above report. Once within the last year there was slight "heaviness" in the perineum for a few days and a small sinus opened, discharged a few drops of pus and then healed soundly.

On February 13, 1903, he passed 1320 c. c. in 13 times, pale yellow, cloudy, strong odor, faintly acid, sp. gr. 1008. Trace of albumen. 17 gms. urea. Copious sediment, pus rather plentiful. No bacilli found.

On the night of April 24, 1903, this patient was taken ill with a looseness of the bowels. His family physician, Dr. M. Herzstein, prescribed and sent him to bed; there was no temperature nor pain. The next day he was better, but passed from the bowels a little blood, and later a large tarry motion; that night and the next morning he was in good spirits and seemed all right; towards nightfall there was a little mucus, and the following morning he declared himself well. During the day the urine was normal in quantity and presented no unusual change. That evening his daughter noticed it was difficult to awaken him. The doctors came at once and found him profoundly comatose, and he remained unconscious until his death, a few hours later.

Case 2.—P. C. M., aged 22, American, student. Grandmother said to have died of consumption; no other history of tuberculosis in family. Had gonorrhea, accompanied by swelled testicle in left side, in 1895. Saw him first May 25, 1895, for acute epididymitis of the right side, attended with great swelling and much pain along the cord, which he thought was caused by violent exertion while swimming a few days before. Under rest and cotton dressing covered by rubber, the swelling soon subsided; the pain disappeared and he went to the country. Some time after, following violent exertion, the swelling returned, an abscess quickly followed, which opened spontaneously, and he came back to me June 27, 1895. The testicle was as large as a small orange. Globus major hard and woody. On the superior, anterior wall of the scrotum near the raphe there was an irregular, circular, perforating ulcer three-quarters of an inch in diameter, through which a considerable portion of the testicle protruded. The organ presented the characteristic appearance of tubercular ulceration, although repeated examination for tubercle bacilli gave negative results. He improved under my care until August 13, 1895, when I left the city for a two months' vacation. The swelling had greatly diminished, but there was no attempt at repair in the ulcer. My partner, Dr. E. C. McConnell, next saw him September 4, 1895, at one of the private hospitals, having been called in consultation. A diagnosis of tubercular orchitis had been made and ablation proposed, a proceeding to which the patient was most vehemently opposed. He had been under the

observation of the attending surgeon about ten days, and it is interesting to notice *repeated examinations had failed to demonstrate the tubercle bacillus*. In this connection it is well to say that so able an observer as Prof. D. W. Montgomery, also a consultant, failed to find the tubercle bacillus, although there was an entire agreement as to diagnosis based on the macroscopic appearance. A conclusion was reached to defer the operation 10 days, pending which time the patient ran away from the hospital and shortly afterwards came back to my partner, who placed him on cod liver oil; and on my return, October 12, 1895, I found him slowly mending. Gradual improvement continued, and in November following, for the first time, the tubercle bacilli were found. During the next few months the swelling subsided, the opening closed, followed by hydrocele that required tapping several times. He put on flesh and regained strength, and had no further trouble until June, 1896, when he reappeared with a beautiful clap. He was placed on large doses of sandal-wood oil, cautioned against all local treatment, and was doing fairly well, when, at the recommendation of a friend with an experimental knowledge of the virtues of sulphate of zinc, he tried to hasten matters by an injection. This was followed by swelling of the right testicle, and, for the first time in his case, frequent, though painless, micturition, and both the gonococcus and the tubercle bacilli were found in his urine. Subsequently this ambitious young man acquired another urethritis, from which he recovered in due time under sandal-wood oil. During this last attack both the gonococcus and the tubercle bacilli were in his urine.

Examination, April 11, 1898 (three years after first examination): General health good. In fine flesh; eats, sleeps and works as well as ever in his life. According to his statement, his sexual powers are "too good." His testicles are about normal in size. Woody knot in left globus major as large as an almond; smaller one in left cord just below external ring. Right testicle normal, but little cicatricial mark on the site of the former extensive scrotal ulceration.

Examination, April 4, 1903 (eight years after the attack): In excellent health. Voids urine three times daily. Small lump, not characteristically tubercular, is felt at the lower end of the left epididymis.

Examination, November 5, 1903: Still in excellent health. Difficult to find any tubercular deposits in scrotum.

(To be continued next issue.)

New York and New England Association of Railway Surgeons.—At the thirteenth annual meeting of the New York State Association of Railway Surgeons, held at the Academy of Medicine, New York, November 12-13, 1903, a vote was taken and unanimously carried to change the name of the association to New York and New England Association of Railway Surgeons. This change will greatly extend the good work of the association and the many benefits to the surgeons and railways in this territory should be mutual. Dr. C. G. J. Finn, Hempstead, L. I., was elected president and Dr. Geo. Chaffee, 338 Forty-seventh street, Brooklyn, secretary. The meeting in 1904 will be held in New York.

The Bacillus of Dysentery.—It seems to be generally admitted, judging from the reports from experimental laboratories, that the bacillus of dysentery (Shiga) is the cause of sporadic, endemic and epidemic dysentery. There is still some question, however, as to whether or not there may be recognized more than one variety of the dysentery bacillus.

PERITONEAL ADHESIONS.*

THEIR SYMPTOMATOLOGY, PATHOLOGY AND PREVENTION.

By E. E. KELLY, M. D., S. F.

A SEPSIS has been the inspiration of much bad surgery. It has made safe, as far as the life of the individual is concerned, many operations which were formerly attended with a very high mortality. It has stimulated the performance of many operations that were formerly considered unjustifiable. A low mortality has become synonymous with good surgery. Many a victim of the scalpel is suffering more from the results of his operation than he did from his disease, while his case is used to swell the statistics of "successful operations" of the enterprising aspirant for surgical honors. It is not a certain indication of a good surgeon that the aspirant for such honors can open the abdomen one hundred times without a fatality. More surgical skill is required to determine when to advise operation and when to advise against it, than is embodied in the mechanics and anatomy necessary for its performance. The success of a surgical procedure should be measured by the net saving of human suffering and the restoration of the individual to his sphere of usefulness, rather than by the hair-breadth escape of the victim from the hands of the undertaker.

In no other part of the human anatomy can the reproach of bad surgery be seen so often as in the abdominal cavity. No more frequent source of chronic invalidism after "successful operations" can be found than that due to adhesions in the abdominal cavity. Many a mysterious and inexplicable disordered function of the abdominal organs, and much of the harassing and irremediable pain in the abdominal cavity is due to peritoneal adhesions. I would not imply that adhesions are largely due to bad surgery, though some undoubtedly are the result of careless and unskillful operations. Many cases are the result of accident and inflammation following infection.

We now recognize that "peritonitis saves life, while sepsis kills. Peritonitis builds barriers against invading hosts, while absorption overwhelms the organism with infectious products." But, while we recognize this preventative process of nature, we also find that it leaves chronic invalidism behind. The peritoneum secretes and absorbs fluids, permits free movements of the viscera upon one another without friction, while at the same time anchoring the abdominal organs to their proper positions. The functional activity of the digestive organs depends largely upon the health of the peritoneum. It is also the body-guard of the abdominal cavity, ready at a moment's notice to throw out exudates to protect wounded viscera or to summon an innumerable

army of leukocytes to imprison, transport or destroy any invading infection. It erects barriers against an advancing foe and limits its field of action. To preserve intact, when possible, this most important membrane and to restore it, when operative assault is imperative, should be the constant effort of every conscientious operator.

Peritoneal adhesions result from injury or infection. Byron Robinson has proven by experiments upon rabbits that handling the intestines, or slight friction of the endothelium, such as that occasioned by sponging, is very often followed by adhesions. Harris has shown by experiments upon the lower animals that bacteria which are non-pathogenic where the endothelium has been undisturbed, become pathogenic after irritation of the peritoneum, even though no microscopic lesion is apparent. Senn by experiment learned that adhesions between serous surfaces occur very rapidly, in from six to twelve hours. These adhesions were found to be preceded by an exudate of plastic lymph which cements the serous surfaces. Between raw surfaces or a raw and serous surface the adhesions are Nature's reparative efforts and are firmer and usually more rapid than where the serous surfaces adhere.

Some investigators insist that all adhesions after surgical procedures are the result of infection; while others hold that mechanical and chemical irritants occasion them without infection. There can be no question but that bacteria cause leukocytosis and the exudation of the plastic lymph from which adhesions form. That adhesions may occur without infection is equally certain. Walthard, of Berne, has made elaborate experiments upon cats and rabbits of great value in determining the etiology of peritoneal adhesions. His experiments were performed with the greatest aseptic precautions possible. His first set of experiments was upon rabbits in which abdominal hysterectomy was performed, exposing the peritoneal surfaces of the utero-vesical pouch to the air, but avoiding contact with sponges, hands of the operator, or other foreign body. In every case, adhesions in the vesico-uterine pouch resulted. He then performed the same operation upon six rabbits, but turned the uterus out of the wound, protecting the peritoneal surfaces with hot pads wrung from hot normal salt solution. Post-mortem examination six days later showed that no adhesions had occurred and no exudate was thrown out. His next experiments were the exposure of omentum and fundus of the bladder to the air for twenty minutes by drawing the mouth of the abdomen through a small incision. Twelve days later adhesions were found in every case between omentum, fundus of the bladder and abdominal incision, but none between intestinal coils which had not been exposed to the air. Another set of cases with similar ex-

*Read at the Thirty-third Annual Meeting of the State Society Santa Barbara, April 21-23, 1903.

posures was made, with the exception that the exposed viscera were protected by hot pads wrung from normal salt solution. No adhesions occurred. Exposures were then made of the viscera to filtered and disinfected air, with the result that adhesions formed in every case. He then used the same apparatus and subjected the exposed viscera to steam at a temperature of 38° C. and in every case adhesions were absent. Walthard concludes that exposure of the peritoneum to dry air is productive of adhesions, while steam and normal salt solution applied constantly to exposed surfaces prevent adhesions. These findings are in accord with the conclusions of Turck, who experimented upon the lower animals, investigating the susceptibility of the peritoneum. In his experiments he found that non-pathogenic germs became pathogenic upon peritoneum exposed to dry air, and that moist heat maintained the normal resistance of the membrane. Turek further found the impossibility of rendering the skin aseptic, but proved that no germs remained after complete cleansing which were pathogenic to the organism, unless shock, undue loss of blood, or exposure to dry air, had lowered the natural body resistance. Therefore, shock, loss of blood, exposure of the peritoneum to dry air, as well as bacterial infection, are etiological factors in the production of adhesions.

The symptoms of peritoneal adhesions may be so slight as to pass unnoticed, or so severe as to produce fatal intestinal obstruction. Pain is a very common and persistent sequel to abnormal adhesions in the abdominal cavity. It is usually referred to some one locality, or is manifested by certain positions or movements of the body.

A recent case illustrating this symptom was encountered in a lady who had suffered from recurrent attacks of appendicitis for many years. She remembered that since girlhood she has been unable to stand erect or lift her right arm above her head when standing, without a drawing pain in the right iliac region, also that extension of her right leg was followed by the same sensation. The appendix was found to be firmly adherent to the right broad ligament and its removal was followed by complete cessation of the former symptoms.

Indigestion and vomiting are frequently the result of adhesive bands which interfere with normal peristalsis.

A case of this kind was observed in Mrs. S., who, some years before I saw her, had, in lifting the marble top of a table, felt something give way in her right side. The accident was followed by severe pain. A few weeks after the accident she began suffering from what she thought was indigestion, with frequent attacks of vomiting. At the time I first saw her she was greatly emaciated and unable to walk any distance without intense pain. Upon opening the abdomen, adhesions were present binding and constricting the ascending colon. Release of the adhesions was followed by relief of all her former symptoms.

Constipation is probably the most common and persistent symptom of adhesions in the abdominal

cavity. It is especially noticeable in women upon whom pelvic operations have been performed, by reason of adhesion about the rectum.

An interesting case of this kind was exhibited by Mrs. T., who had had nephrectomy of the left kidney performed through the abdominal route. She had suffered since the operation with most obstinate constipation. In attempting to pass the proctoscope over the promontory of the sacrum the instrument passed through the rectal wall. An immediate repair was made and the cause of the accident, as well as of the constipation, was found to be a firm peritoneal band binding the rectum upon the sacro-iliac junction. Fortunately the accident was followed by a favorable result and the constipation of years standing was relieved. I do not recommend such heroic measures as a common remedy for constipation, even though in this case the result was satisfactory.

Intestinal obstruction more or less complete is a not uncommon sequel of peritoneal adhesions. One author reports that thirty-one patients with intestinal obstruction, of whom five died, occurred in a series of 421 abdominal sections and 148 vaginal hysterectomies. Sir Spencer Wells admits having lost one and one-tenth per cent. of patients in his first thousand abdominal operations, from obstruction of the bowels. It must also be kept in mind that the evil effects of adhesions may not manifest themselves for years after the operation causing them. Shively, of New York, reports a case of fatal obstruction of the bowel occurring five or six years after an ovariectomy in which the intestine became adherent to the abdominal incision, persistent and severe attacks of colicky pain and obstinate constipation had persisted from the date of the operation. Burrell, of Boston, reports a case of total obstruction of the bowel five months after operation, the patient being well in the interval. Bidwell, of London, reports a case of obstruction occurring four and a half years after operation. Doubtless many fatal cases of intestinal obstruction occur which are not recognized, but are attributed to peritonitis and intractable vomiting. This latter symptom should always make us suspicious of obstruction of the bowel.

Peritoneal adhesions may stimulate other conditions, an interesting instance of which I wish to record.

Mrs. H., aged 48, had suffered for some considerable time before coming under my care, with what she termed "stomach trouble". For a number of months she had been losing weight, vomiting frequently after eating, and suffering great distress when she did not vomit. Her skin was assuming the parchment yellow color so often seen in malignant diseases and her strength had so failed as to keep her in bed. Upon physical examination, a hard nodular mass was easily felt in the region of the pylorus. Examination of the stomach contents after a test meal showed complete absence of hydrochloric acid and the presence of the yeast fungus. From these symptoms it was easy to form a probable diagnosis of cancer of the pylorus. Operation was advised and submitted to. Instead of a carcinoma of the pylorus, peritoneal adhesions were

found which knuckled the first part of the duodenum, thereby causing a partial obstruction of the organ. Perfect restoration to health followed the release of the adhesions.

How to prevent these serious sequelae had led to much experimentation, which has developed many helpful suggestions and some ingenious and unique methods of preventing them.

The abandonment of the *en masse* ligature, which a few years ago was the universal practice in operations about the female pelvis, has been attended with a great reduction in the number of serious peritoneal adhesions. No careful surgeon of the present day would leave a large pedicle without an effort to cover it over with peritoneum. The separate ligation of the vessels with the burial of all raw surfaces under adjacent peritoneum is an indispensable part of the toilet of abdominal operations not now neglected by conscientious workers.

It is scarcely necessary to insist upon the most rigid asepsis, since the role of bacteria in the production of adhesions is universally admitted, but even this does not prevent some bacteria from access to exposed surfaces. Turck has proven that hands of the operator, the linen about the field of operation after use, the skin of the patient, will produce cultures of bacteria after the most rigid disinfection possible. Therefore, it is highly essential to protect exposed serous surfaces by hot moist pads; to avoid handling the exposed organs as much as possible; to maintain the bodily heat by protecting the patient's trunk and limbs, and by keeping the temperature of the operating room sufficiently high. Turck recommends the use of hot water bags in the abdominal cavity instead of gauze pads or sponges, because they maintain the heat better and thus sustain the normal organic resistance and prevent shock. It is generally admitted that the use of antiseptics in the abdominal cavity, by their irritation of the endothelium of serous surfaces, renders these surfaces more susceptible to infection; consequently they should be abandoned. All blood clots should be removed, since they may become organized and cause adhesions. At least one case of fatal intestinal obstruction has been traced to this cause. Careful preliminary preparation of the bowels is of great importance in preventing auto-infection and in bringing the excretory organs to their highest efficiency. Careful replacement of the intestines in their natural position is of great value, since pseudo-ileus and total obstruction of the intestines are usually the result of adhesions of the bowels in abnormal positions. Filling the abdominal cavity with hot salt solution has been suggested as a valuable means of floating the intestines into their normal position. Every operator has observed that the most extensive adhesions may be present between intestinal coils which lie in their natural position, without caus-

ing interference with peristalsis. Such adhesions are very common in tubercular peritonitis.

(To be continued next month.)

WHAT IS CONSERVATISM IN MASTOIDITIS?

By W. S. FOWLER, M. D., Bakersfield.

AS an intelligent understanding of the language used, and a practical agreement on the meaning of specific words or terms in our premise is necessary in sustaining any argument, I have endeavored to learn what is usually understood by "Conservatism" when the word is used in connection with surgical treatment of disease.

Inquiry among surgeons shows a decided difference of opinion on this point. Several among those whom our profession delights to honor as leaders, coincide in accepting the interpretation "That operative treatment which conserves most in health, function, comfort and well being with reasonable insurance against recurrence"; but quite a number, well known as authors and teachers, are better satisfied with the generally accepted political definition, "A disposition to maintain and adhere to an established custom"; and, as there seems to be no established custom in the treatment of mastoiditis, I must appeal to the society to accept the first definition given, as being more in accord with surgical principles and much more comprehensive than the latter.

The position of the self-named conservatives in the management of this disease, judging from recent reports of their work, seems to be one of masterful inactivity and expectant treatment carried to an extreme never before heard of since surgery became a science. In one series of cases reported, the surgeon seems to take pride in seeing how grave a case can be reported as recovering without operation, even describing patients in so deep a stupor from the effects of the disease that "they can scarcely be roused and could not talk intelligently when roused". Those of you who have cared for such cases, and they come to the lot of every general practitioner at some time in his career, will appreciate the gravity of the condition described, and while I do not deny that a patient of this kind may recover without operation, doubtless there is no one in hearing who would postpone active interference longer when such symptoms present themselves and there is no doubt of the diagnosis.

It is as a protest against the evil influence of such reports that this paper is written and it is a matter of much surprise to the writer that there can be any hesitation in the mind of any up-to-date man as to the proper course to pursue when the diagnosis has once been made. Why should this disease be singled out as an exception to those rules so well recognized as conservative in

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general surgery: With pus in cellular tissue, in the abdominal walls, in the periosteum of bones, the sheaths of tendons or even in the cavities of the body, modern surgery has demonstrated that early evacuation and thorough drainage is conservative treatment, and wherein does mastoiditis differ from these? In gravity only, perhaps, for where loss of function may be the result of expectant treatment in many cases in other portions of the body, life itself is at stake in most cases of mastoiditis.

No operation opening the cranium can be considered a minor one, for with the irregular positions and malformations of the parts involved, the possibility of injury to adjacent and important structures and the dangers or complications of the anesthetic, they are always of gravity and not to be undertaken lightly nor without good and sufficient reasons. When after or during an otitis purulenta, pain, redness, swelling, or tenderness over mastoid, singly or together with other symptoms, cause us to make a diagnosis of mastoiditis and free drainage from the middle ear does not exist, Paracentesis tympani is accepted as the proper procedure. The case has become a surgical case, and this effort to establish drainage is only a tentative one illustrating and indicating the methods to be followed if this operation is not attended by an amelioration of the symptoms. That this is conservative treatment in the minds of all writers on the subject there seems to be no doubt, and having made an opening sufficiently large to accomplish the result desired, we are sometimes able by the application of heat or cold to restrain inflammatory action and pus formation. Further surgery seems unnecessary at the time, and recovery seems to take place; but if the symptoms do not ameliorate, rather grow worse and the process of pus formation is not checked, shall we wait and pray that success will attend our waiting, continue the application of heat or cold and hope for better things until symptoms of sepsis, general or meningeal, make their appearance and the case has become one of such gravity that the life of the patient is in jeopardy? As surgeons you will say that such a course is but little less than criminal and the medical attendant should be censured for what must become fatal neglect.

Delay is usually dangerous, and this condition is not an exception to that rule. From the near vicinity of the brain to the location of the primary infection, the atrium, and the presence of large blood vessels in close proximity, the complications of septicemia, epidermal suppuration, sinus thrombosis, phlebitis, meningitis and brain abscess are to be feared; and please note, the only question separating the self-styled conservatives from the others less holy, is one of *time*. After waiting long enough for the symptoms of ex-

ceeding gravity, an operation (if not too late) is recognized by all as the proper procedure; then why wait? If after paracentesis the symptoms do not change for the better, why expose the patient to further danger, why not open the mastoid and relieve the condition?

In the hands of a competent operator, the operation does not endanger the life of the patient, while the presence of the disease unabated certainly does; and suppose a possible recovery even after grave symptoms have intervened, will not such a patient retain an increased susceptibility to subsequent attacks, and has he really regained as satisfactory a condition of the organ involved as would be assured him after a thorough operation?

Personally, I am sure from experience with those who have avoided operation by the advice and with the co-operation of the do-nothing surgeon, that the result is much more satisfactory when the operation is promptly performed.

The position I take is that mastoiditis is and can be only a surgical disease, and that its treatment differs in no way from other surgical diseases of similar nature, and that conservative treatment consists in early and thorough operative procedure.

NATIONAL BUREAU OF MEDICINES AND FOODS.

By H. H. RUSBY, M. D., Dean of the New York College of Pharmacy.

(The following statement from the chairman of the Joint Committee of the American Medical and the American Pharmaceutical Associations gives a *resumé* of some facts in connection with the present status of the discussion of this most important question. The pharmaceutical journals, which doctors seldom see, have devoted a great deal of space to this matter, and many of them that formerly bitterly opposed it, have now come to see its absolute necessity, if the tremendous interests involved are to be properly met and dealt with. It is not certain that the organization proposed will be perfected exactly as planned, but it is absolutely certain that the chaos of present commercial conditions will eventually necessitate the formation of some such Bureau of Standards as is here suggested. Some of the matter here given has appeared in the *Western Druggist*.)

To the Editor of the State Journal: Following the meeting of the American Pharmaceutical Association, at Mackinac Island, in August last, where the committee on a proposed National Bureau of Medicines and Foods made its report and was continued for further work, the pharmaceutical journals of the country have commented extensively on the proposition under consideration by the committee. As but little space seems to have been given to the matter in medical journals, and as physicians seldom see pharmaceutical journals, I should be very much pleased to have you publish the following discussion of the principal points raised in this connection. The *Western*

Druggist printed a long and sweeping condemnation of the whole matter, in its editorial pages, and some portions of what follows have been elsewhere published and are directly in reply to this condemnation. The comments of that journal would not be specially cited here, were it not that they are merely typical of most statements and contentions made by those who either do not fully grasp the project, or are biased in their attitude toward it, or have a preconceived antipathy. As is usual in all such cases, the editor in question, like many others who have opposed the establishment of the bureau, makes admission of all that is contended by the committee, and then seems to forget what he has admitted. Much of the balance of "argument" is simply either general non-specific denial of the practicability of the project, or is erroneous statement based upon a biased view or a lack of understanding of what is really proposed as set forth in the published statement of the plan of the bureau. The American Pharmaceutical Association unanimously passed the following preamble and resolution, and all statements contained in it remain unquestioned:

"Whereas, The foods and medicines supplied in the United States do not so uniformly agree with proper standards of purity, quality and strength as they should; and

"Whereas, A degree of distrust and want of confidence concerning the quality of such foods and medicines prevails to a discouraging extent; therefore it is

"Resolved, That a more perfectly organized system for remedying the above-mentioned conditions than that now existing should be devised and put into operation."

The other resolutions introduced by the committee were referred to the council, definite action being deferred till next year.

Before commencing his sweeping condemnation of the plan as proposed by the special committee, the editor of the publication in question discusses the foregoing general proposition in such a clear manner that I will beg your permission to quote from him.

"The need of an agency with powers adequate to cope with the gigantic evils which so seriously threaten health and life through deficient medicines and foods is unquestioned. The joint committee was none too severe in its characterization of these evils and was clearly in the right in demanding immediate and effective remedial measures."

* * * * *

"The necessity of remedial legislation being conceded, as it is by practically every reputable manufacturer in the country and by all others who have given the subject earnest and disinterested thought, the question is what form shall this legislation take? Shall it be that of state legislation, federal enactment or the proposed Bureau of Medicines and Foods acting with or without governmental co-operation? Laws by the states have been tried and when wisely drawn and intelligently administered have been productive of great benefit, but for causes which need not here be enumerated, their collective influence at the best has been restricted and their benefits offset by evils which have reduced the net results to very questionable value. The thorough remedy is, we must conclude, not to be found in state legislation.

"As to federal legislation it must be confessed the results thus far have not been very promising, though the splendid work of Dr. Wiley in the Agricultural Department in the establishment of a chemical laboratory equipped with expert and administrative features of unquestioned efficiency indicates in a degree the possibilities of fearless and thorough national legislation in this direction."

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"The proposed bureau, according to its authors and promoters, was to be organized as a corporation governed by a board of ten directors, five to be appointed by the American Medical Association and five by the American Pharmaceutical Association. A joint committee from the two associations had previously been appointed to formulate a plan for the work, and it was on the report of this committee that the A. Ph. A. was requested to take action. The plan is given in detail in our news columns. In brief it provides that the bureau, constituted as before stated, shall examine into the quality of the products of all manufacturers of medicines or foods who shall apply for associate membership in and become members of the bureau and that the bureau shall attach its certificate or label to *all such products as shall conform to the established tests of purity and quality*. The bureau does not propose to take official notice of impurities or adulterations, but proposes to refer such information to the proper federal authorities for such action as present or future federal legislation may justify. In other words, the bureau proposes that its work shall be exclusively commendatory and never directly condemnatory, thus avoiding the risks and labors incident to prosecutions and any civil or criminal liability for unwarranted accusations."

Thus it is evident that even the strongest opponents of the bureau idea admit every essential point in the argument. First, the vital necessity for dealing in some competent way with the dangers of the situation. Second, that legislation of whatever kind has not been able to cure the evil, and probably will not go far toward achieving that end. Third, that the bureau would label only such products as conform to established standards and tests. Fourth, that it would keep out of much profitless and costly legal complication by turning the condemnatory work over to the Government, where it properly belongs, and attending only to the commendatory work.

The whole question at issue can be thus stated: Shall our food and drug supply be purified by a system of only condemning the bad, or of condemning the bad and commending the good? The editor in question demands the former, and incidentally accuses the bureau of cowardice and confessed incompetency, because it will not assume this responsibility. This charge is denied on the following grounds:

1. It is evident that the American Pharmaceutical Association would not authorize the organization of a condemnatory bureau. Even after the plan has been so drawn as to eliminate this feature entirely, the association is still fearful of some possible complication, and makes this groundless fear the chief reason for hesitating to take definite action.

2. No means exist for publishing such condemnatory statements, as the journals, both medical and pharmaceutical, refuse to publish what may offend their advertisers.

3. The more important of the objects sought cannot be attained in this way.

4. Condemnation is provided for in the plan presented, and in a way far more effective than that suggested. It is proposed that the condemnation shall come from the Government.

For these, and other reasons, we consider that the most impracticable and injudicious suggestion that has been made in connection with the bureau discussion is this one, that the bureau should resort to a system of condemnations in the way proposed, and especially that it should depend upon that method alone. If support for this view is needed it can be found in the minutes of the scientific section of the association at its last meeting, showing that the important work of that section was held up during a large part of one evening, because its committee on adulteration had reported impurity found

in a product of one of the members present. It is probable that this finding was erroneous, but let us assume that intentional adulteration had been practiced, would not the member have felt so much the more that a strong and prolonged objection was necessary to his reputation? Is the association cowardly and incompetent because it objects to having its work thus frustrated, even if it were willing to ignore the ruinous effects upon its treasury?

Again, the writer forgets that he has already informed his readers that the bureau plan specifically provides for a system of condemnatory authorities with which it proposes to work in association.

The commendatory plan which we advocate was adopted after very careful consideration. Since the plan has been published we have learned that the Department of Agriculture has also advocated the commendatory plan as the best means of improving the quality of the milk supplied in cities.

The chief, and thus far the only real argument brought against the commendatory plan, is advanced by many of the larger manufacturers. They say: "Our name and reputation is such that it is a guarantee of the quality of our products; to place the guarantee of any outside board or bureau upon our packages would be a blow to our pride and to our self-respect." Should such an argument be considered weighty in view of the statements, admitted to be even less than the actual full truth, regarding the dangers of the present situation?

Disregarding for the time the many minor considerations presented in the bureau plan, let us consider the main issue concerning drugs and medicines.

The retail pharmacist is required by the professions, especially of medicine, by the common law and by the statutes of most states, to supply articles which correspond with the U. S. P. standards. If he does not he is liable to fine and perhaps to imprisonment. Most of these articles he purchases from the manufacturer. But the manufacturer is only nominally held responsible. From such technical responsibility as rests upon him he finds it easy to escape. The proof of this is found in the great amount of non-standard goods in the market. Now, is it not to be expected that where so heavy a responsibility rests on the retailer, some corresponding provision for meeting it shall be granted him? What provisions do exist? Nominally there are three; in reality there is none that is more than a farce. Let us examine these three in order.

First, there is implicit trust and confidence in the intention and in the infallibility of the manufacturer. Unless we misunderstand the editor he demands this, and charges any one with impertinence and insult who denies it. If it is sufficient, why do the evil conditions exist which he freely admits? Who, or rather what, are these manufacturers? Are they persons? For the most part, no; they are companies. We have paid our honest respects to the individuals represented in them, hence need make no apology for pointing out that in their business capacity their personality is largely laid aside. They have told us in these words that when they enter their offices in the morning the human heart is removed and one of marble is substituted. They become parts of the machine. The machine has no conscience, no moral responsibility, no soul, no personal attributes except such as are present for business purposes. Just so far as the business managers depart from this principle they are unacceptable to their companies. It is true that many of these companies believe that the exercise of the above attributes is good business policy, but there are many and large ones which do not, which sneer cynically and fiendishly at suggestions of morality in their business; and the existence of one such renders implicit confidence in the class im-

proper. Not one of them thus trusts any other. Each rigidly examines the goods offered him by the others; yet they claim to justly feel insulted if the great army of retailers claims the right of distrusting their goods without examination. And this trust and confidence demanded in these morally irresponsible mechanical institutions is akin to that with which Christians worship their God, a trust on which the pharmacist must take his chance of going to jail if it is misplaced! We make no mistake in denying both the efficiency and the propriety of trusting the manufacturers, and I charge, wishing that every pharmacist and physician might read it, that the demand is itself an insult to the intelligence and independence of every one of us.

The second nominal method by which the pharmacist is expected to meet his responsibility is a proposed system for punishing culprits who are caught supplying non-standard goods. It will help, and for that reason we have provided for it; but it will not accomplish the purpose. There is but one thing that can adequately protect the man who is about to purchase an article on the perfect quality of which his reputation and freedom may depend: that is a knowledge of the character of that particular article. A knowledge that some one else, at some other time, in some other place, has been punished for supplying some other article is not saving knowledge. Common sense teaches that he must satisfy himself that this particular article is standard. Has he any means for doing so? Nominally, yes, actually, no! The Pharmacopeia has, say, a thousand tests designed to be used on such occasions. One or more of these applies to the ounce of extract that the pharmacist may be about to purchase. From two thousand to eight thousand other pharmacists will purchase the remainder of that particular lot of extract. What portion of these thousands can and will apply this test, and the nine hundred and ninety-nine others of the Pharmacopeia in similar cases? The bureau proposes to make one test of that lot and inform the interested thousands of the result.

In this statement is expressed all that there is to the essential nature of the bureau proposition. Let us lay aside all sentimental considerations, and all secondary and incidental questions regarding the measures to be employed, and discuss this one proposition. The alternatives to it are to have the same operation repeated thousands of times by individuals, or not to have it done at all, thus reducing the official tests and standards to the status of a farce. The latter is abhorrent to all and suicidal to the pharmacist. The former is a monstrously wicked waste of material, time and money, which should not be tolerated in this age. The supposition that these tests will be applied constitutes the sole controlling influence in the construction of the Pharmacopeia—in fact, its sole reason for existence. It has been claimed that it is impracticable for a bureau to make so many tests as are involved in its plan; yet the alternative proposition assumes the making of thousands of times as many. By whomsoever made, that claim is pure bosh.

They declare a testing bureau utterly impracticable. We reply that it is absolutely inevitable. We do not know when nor just how it will be established, but it will come by virtue of the necessity for it. We are not time servers. We did not enter upon the present effort with any sanguine feelings regarding an easy and immediate accomplishment. Some pioneers must fall, and our scalp-lock is ready for any who can take it. That will not affect the principles at stake except to advance them. There were grave doubts regarding the advisability of looking to the American Pharmaceutical Association at all. The possibility that it might desert all pharmaceutical

interests save those of the wealthy manufacturers was discussed. But now that a year has been gained for consideration, some progress is likely to be made. When pharmacists shall have come to appreciate the result to be attained, the battle will come on. We predict that for very shame the manufacturers will yet cease their virtual refusal to allow their customers the privilege of examining their goods before purchasing them.

As to the American Pharmaceutical Association, its treatment of this question is now under public observation. Its members, almost without exception, have accepted as true the presentation made unanimously by the bureau committee regarding the grave imperfections in our present medical and food supplies, and which has been reprinted, with open endorsement, by the *Western Druggist*. Incidentally the association's action or refusal to act upon that report will indicate its attitude toward physicians' dispensing, and toward that specifying by physicians to which they claim that they are forced by distrust of existing products, and which, in turn, compels the pharmacist to keep in stock many parallel lines; also toward that wholesale substitution that is a natural, almost an inevitable result. The editor has not referred to these matters, but the bureau proposition has forced them upon the attention of the Association.

It will be a pretty serious business for the Association to virtually send a message to the public, and especially to the American Medical Association, that it refuses its endorsement of the only effective proposition ever offered it for safeguarding the reputation and the business of retail pharmacists, and for harmonizing the interests and practices of pharmacists and physicians, merely because the plan is unsatisfactory to the utterly selfish and unreasonable elements among the manufacturing establishments.

Some of the questions raised by several of the larger manufacturing houses that object to have the certificate of the proposed bureau placed upon their goods, or who object to have their goods investigated and certified by the bureau, are brought out in the article under special attention and may be briefly considered as follows:

1. "What redress would the injured manufacturer of a pure product have at the hands of a bureau without financial or other responsibility?"

There would not be an "injured manufacturer of a pure product." For if the product is pure, the manufacturer would not be interfered with. If the bureau thought something wrong with the product, it would notify the manufacturer first, next satisfy itself that he was *not* the manufacturer of a "pure" product, and then "injure" him by simply withdrawing the use of its labels upon his product. The bureau would not attack any one, and could not injure any one who was honest and really manufactured a pure product. The bureau does not propose to give or deny its certificate to the manufacturer, but only to a specific lot or batch of a certain article submitted to it.

2. "Who would certify to the certificate of the bureau so as to afford a reasonable guarantee that inferior products were not commended at the expense of an honest manufacturer of superior goods?" Answer: The law would do so. The absolute and utter ruin of the party responsible would prevent such action. Each assayer would handle but a few, or even one article, according to the extent of the business in it. He would necessarily become very expert. His name, as well as the bureau's would be signed to all his results. He could be held responsible, and he could hold responsible any who unjustly accused him.

3. "Why, in any case, should any manufacturer join a bureau in which his risk of injury would be directly proportioned to the extent of his prestige

and business?" Answer: A hard problem, but one that has been worked out along several lines. In the first place, we believe the hypothesis unsound. The bureau handles a small per cent of the manufacturers' products. If these are correct, his prestige and business in the others are, if anything, benefited. If not, then at least they are not affected in any way. But if he will not so admit, and persists in his refusal, he will be thereby alone convicted of dishonesty and untruthfulness, which will hurt his prestige and his business full more. The editor in question must not try to escape the logic of his argument. He means that the product of two houses is identical in quality, but that one of them has successfully promulgated the falsehood that they are not, and that therefore he should be left to enjoy the proceeds of his falsehood. I say that he will save his prestige and business by refusing to pose publicly in making such a demand. Even if it were not so, how about other classes than himself? Is the bureau, or are its promoters, the agents of the manufacturers in this affair? But, says the editor, you are doomed if you have not the support of these manufacturers. We shall see! We have gone a long way into this particular question, and if others can afford to deceive themselves regarding our resources, we do not.

5. "If the bureau dare not say what is bad, how dare it assume to say what is good? If it dare not condemn, by what rule of equity does it dare to commend?" etc. How much better to have ascertained what we dare and dare not do before holding us up to unmerited contempt! Judgment sometimes takes the place of daring. We dare lay our right forefinger upon the table and chop it off; but we deem it better preserved for the pointing out of errors. We dare, but think it better to tell the manufacturer privately that he is in error, and to secure the correction of the error and its avoidance in the future. If he then persists, the justness of punishment is no longer in doubt; it will come surely and swiftly, and will be all the heavier because that gloves were employed—though "lined with softest wool"—in the handling of the case.

H. H. RUSBY, M. D., Chairman, Joint Committee.

DEATHS.

William M. Warren.

On November 11th died a man worthy of more than passing notice. Mr. Warren was typical of the progressive American boy, whose history is composed of a chance to work, the opportunity to get results, and the ever consuming ambition to advance—to progress. At the age of 17 he entered the employ of Parke, Davis & Co., and when 32 years old was made general manager. He died at the age of 39. For some time he had suffered from a continuous fever, subsequently known to be due to spinal irritation, and an accident brought about an acute attack of spinal meningitis which resulted in death. Dr. E. R. Brackett, of Boston, operated upon Mr. Warren, but only to disclose the hopeless nature of the disease. If success means more than the getting of gold, if it means the accomplishing of results determined upon with a clear head and accurate foresight, then was this man eminently successful. No matter what the field of activity, the life of a successful man, in this sense of the word, is well worth careful study. Success cannot lie in environment, for in all large enterprises the environment is the same for the many, yet only the few reach the goal. I liked and admired the man, though we differed—strenuously. He was a good fighter. *Requiescat in pace.* P. M. J.

RUPTURE OF THE UTERUS.*

By D. A. HODGHEAD, M. D., San Francisco.

I BRING this subject before the profession not because I have been making any experiments in this line, neither for the reason that my experience has been extensive, nor because I have anything new or original to offer. I present the matter chiefly for the purpose of calling special attention to some errors in the practice of obstetrics, and to emphasize the necessity for certain procedures and the equal necessity for the avoidance of others.

The Chairman of the Committee on Scientific Programme has made diligent search among the members of the society in order to ascertain who was willing to open the discussion on this question, but neither he nor myself has been able to find any one who has met with a case. The accident is a rare one, yet I believe it is now and then met with and not recognized, so that the actual number of cases is most likely greater than statistics would seem to indicate. The accident is not a frequent one in lying-in hospitals. It is most likely to occur in the outlying districts where either no physician is secured, or, if secured, he is found to be too conservative to interfere in the progress of labor.

The many predisposing causes, such as overdistension of the uterus from hydramnios, hydrocephalous, fatty and calcareous degenerations, malignancy, cicatrices, we shall pass over without comment. The determining causes lie in the too greatly prolonged second stage of labor. The only exception is a malignancy of the cervix which prevents dilatation and puts the tissues in a condition to be easily torn. Aside from this, the accident, as I have said, results when the second stage of labor is too greatly prolonged. Whether this has for its cause a lack of proportion between the canal and the presenting part, whether there is a malpresentation, such as an occipito-posterior position, or whatever else may interfere with the advance of the presenting part, it is to be remembered that in the first as well as the second stage of labor only the upper two-thirds of the uterus contracts while the lower third dilates and distends. After the expulsive pains begin the upper two-thirds of the uterus becomes thicker and stronger, while the lower third becomes thinner and weaker. If the progress is not commensurate with the distention the result will finally be that this thinned portion of the uterine wall must give way.

My experience with this accident is limited to a single case, and although this occurred nearly fifteen years ago, all the circumstances were so indelibly impressed upon my mind that the case is yet very clear. It has never been reported and therefore I shall report it now. The patient, Mrs.

M., was a woman of Irish birth, strong and healthy, and at the time I was called to see her was in her third labor. The first stage proceeded without any unusual occurrence; the second stage began when dilatation was complete, the membranes had ruptured and the liquor amnii had escaped. The patient gave a history of two difficult labors, but in each was delivered of a living child. The expulsive pains were frequent and powerful. I watched for two hours, during which time the head did not engage. I then determined to interfere and attempted to apply the forceps. The head, however, was so high and apparently so large that I could not succeed in getting the instruments locked. After repeated efforts and failures I desisted and sent for help. An hour passed before the consultant arrived, during which time I had lessened the pains by morphia and chloroform.

The consultant was an aged man of large experience. After hearing the history of the case he advised another attempt at the forceps, which was made by himself, but with the same results that I had already secured. He was not able to lock the instruments. By this time the patient had recovered from the sedatives and the pains had returned with renewed vigor. Within a few minutes, however, I noticed that the pulse increased from 70 and 80 per minute to about 140, and the uterine contractions ceased. My consultant laid down his instruments, rolled up his sleeves, put his hand into the uterus and performed version. He succeeded in a short time in delivering the body of the child. I was administering the anaesthetic. He was unable, however, to deliver the head. He made repeated attempts with the final result that he severed the body from the head, which latter remained in utero. He then asked me to deliver the head. I replied that I considered that impossible under our present plan of procedure, and that there was nothing to do but to crush the head with the cephalotribe or to do abdominal section. He made another effort to deliver, but in a few minutes desisted, and informed me that he was worn out, would return to town and send another physician. I implored him not to do this, but remain with me and let us send for more help because the condition of the patient was getting more and more serious. He, however, persisted and drove away. From that time until another physician arrived, which was fully an hour and a half, I stimulated the patient, but made no further effort to deliver. There were no uterine contractions, and no external evidences of hemorrhage.

When the second consultant came he made an examination and as he turned to me with a look of horror upon his face and asked me to make an examination also, I was satisfied that something very serious had been discovered.

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

Upon introducing the hand into the uterus it passed through a rent in the uterine wall and the undelivered head was discovered to have escaped from the uterine cavity and was lying under the stomach. While we were making hasty preparations to open the abdomen the patient went into profound collapse, and in a few minutes was dead.

An autopsy revealed a rupture in the uterus, at right angles to the cervix anteriorly just above the vaginal junction, about two inches in length, and another tear extending at right angles to this along the anterior uterine wall to the extent of six inches, and reaching almost to the fundus. There was considerable hemorrhage, but not sufficient to have caused death. The patient died from shock. It was easy to understand that the long second stage, during which the force of the uterine contractions had been expended in dilating and thinning the uterus, the result was that when turning was attempted this thin portion gave way. It was also very apparent what measures should have been adopted earlier. The head proved to be at least an inch greater in diameter than was any portion of the superior strait, and could not have been delivered except by performing craniotomy. This would have been extremely difficult, since the head was not engaged, and the course which would have offered the patient the best chance for life was abdominal section either during the first stage or early in the second.

I wish again to emphasize the fact that the real cause for rupture of the uterus lies in a prolonged second stage, and to call special attention to the two prominent symptoms of rupture, namely, rapid increase of the pulse rate and the entire cessation of uterine contractions.

DISCUSSION.

Dr. G. A. Cole, Los Angeles—I was very much interested in the report of this case. It reminded me of the report of a case I heard read in 1893 before the British Medical Association on this same subject, by a gentleman who was called in to see a woman who had presented a history of labor some twenty-four hours before. She had had very severe pains and the country practitioner had left her. Twenty-four hours later the author of the paper had been called and found the child in the abdominal cavity, ruptured uterus having occurred. There were two or three very interesting points; first, that the pains had ceased entirely on the rupture of the uterus. The patient had been in such a condition that the attending physician had gone off and left her and had not noticed the rupture of the uterus. And furthermore the patient, after the rupture, had been in such a condition that she was able to walk over a mile. The patient died; the abdomen was opened, but owing to shock and sepsis, the patient eventually died.

Dr. O. O. Wilherbee, Los Angeles—I had a case of ruptured uterus exactly like the report, in which instance the second stage was prolonged, pains unusually vigorous and rather free hemorrhage previous to birth of child, but as child passed through there was little or no hemorrhage. On making careful examination, I found a rent of unusual length in the left aspect of the vaginal wall, including the cervix and

lower portion of the uterine body. Our attention was directed to it by the free hemorrhage. Fortunately I recognized it in time to prevent hemorrhage of such severity as to cause death, and with the aid of two nurses assisting me, and with pressure from without, I held the hemorrhage in control and fortunately was able to stitch this rent up with catgut. I speak of it merely as it comes to my mind. It certainly did approach abdominal rupture with hemorrhage so free that it endangered the life of the patient.

PERSONALS.

Dr. J. L. Maupin of Fresno, who has been taking a post-graduate course in New York and Philadelphia, returned home on December 15th, and has resumed practice.

Dr. Mrs. Jessie D. Hare, who retired from the practice of medicine a few years ago, has again entered the ranks and become a member of the Fresno County Medical Society.

Dr. J. H. Parsegan, an active member of the Fresno County Medical Society, has located in San Francisco.

Dr. J. R. Liverman, who has been located at Kingsburg for the past year, has removed and is temporarily in San Francisco, taking a post-graduate course.

Dr. C. J. Kjaerbye, a former practitioner of Salt Lake City, Utah, has opened offices in Fresno.

Dr. F. C. Galehouse of San Francisco has located in Fresno, with the intention of making that place his home.

Drs. George McChesney, William G. Moore and Robert A. McLean of San Francisco are in New York. The two former are taking a special course in surgery.

Professor M. Allen Starr, M. D., LL. D., of the Medical Department of Columbia University, of New York, has been elected a corresponding member of the Neurological Society of the United Kingdom, London. Dr. Weir Mitchell is the only other American member.

Dr. James P. Booth has removed from Needles, San Bernardino County, to Los Angeles, and has opened offices in the Bryson Block.

Secret Remedies—"Why cannot the doctors write their own prescriptions and adapt their remedies to the ever-varying exigencies of disease? Why should the vender of proprietary and secret remedies be upheld by so many of the profession, when Edward Jenner, after twenty-two years of laborious experimentation and research, freely gave the priceless boon attained to mankind, and when he could have made countless billions of money from the whole world by dispensing it as a secret and sovereign remedy against a loathsome and desolating scourge?"—William T. Howard, M. D., in An. Add. to Maryland Med. Society.

An obelisk of unpolished gray granite has been placed over Virchow's grave in the old Matthai graveyard, Berlin. It bears on one side a black marble tablet, on which is inscribed "Rudolph Virchow," and the date of his birth and death. A statue of Virchow will also be erected near the place where his scientific work was conducted.

A statue in honor of the eminent French neurologist, M. Charcot, has been erected at Lemolon-les-Bains.

PUBLICATIONS.

The Practical Application of the Roentgen Rays in Therapeutics and Diagnosis. By William Allen Pusey, A. M., M. D., Professor of Dermatology in the University of Illinois; and Eugene W. Caldwell, B. S., Director of the Edward N. Gibbs X-Ray Memorial Laboratory of the University and Bellevue Hospital Medical College, New York. Handsome octavo volume of 591 pages, with 180 illustrations, nearly all clinical. W. B. Saunders & Co., 1903. Cloth, \$4.50 net; Sheep or Half Morocco, \$5.50 net.

This is far and away the best thing yet published on the subject. One is tempted to say it is really the only book on X-Rays yet written that is really worth paying good money for. The work has been in preparation for some two years or more, and the result of careful digestion of an immense amount of material is evident. To the ordinary user of an X-Ray outfit in general surgical work, many of the refinements of apparatus, technique, etc., here described and illustrated will be a revelation. The first portion, by Caldwell, deals with apparatus, tubes, etc., and contains a general historical resume of the subject. Here even one well skilled in the practical every-day use of X-Rays will find much of both interest and profit. The author discusses the question of static machine vs. coil in a very wise fashion, and frankly admits that it is largely a question of personal preference, though the coil is rather more to be relied upon and is less difficult to keep in order. Many handy and ingenious devices are illustrated. The illustrations throughout are excellent, and those showing tubes working properly and badly, are well colored. The balance of the work is written by Dr. Pusey and is a very up-to-date presentation of the clinical side of X-Ray work. He has gone through a mass of printed stuff and has culled from it most of what is of any value. Here the illustrations are from clinical cases and are very well reproduced. The photographs of patients treated for various skin lesions are most convincing, and it is difficult to imagine anyone denying the usefulness of X-Ray treatment, after merely turning over the pages and carefully observing these half-tone reproductions. In discussing the probable theory as to the cause of X-Ray dermatitis, Dr. Pusey quotes at length from a paper by Dr. Philip Mills Jones, of San Francisco, on this subject, in which the contention is made that these effects are due to absorption of radiant energy. The author refers to one objection to this theory which has been frequently voiced, to the effect that the action of light and X-Rays cannot be similar because X-Rays have but little, and light has a considerable, effect upon bacteria. This contention was answered by Dr. Jones almost before it was raised, and in the portion of his paper which Dr. Pusey has quoted: "In comparison with the X-Rays the ultra-violet rays from an arc light have a very long wave length, and hence will part with all their energy through absorption by the molecules of the superficial cells." Even assuming that the recent discovery of radium and its curious properties necessitates a modification of the original conception of X-Rays as true ether waves of the same sort as light, the fact will still remain that they are a form of radiant energy, and that light is a form of radiant energy, so that the purely theoretic consideration of the question will not be altered save for the substitution of one set of terms for another. The bookmaking is good, aside from the contained matter, and the total net result is the rather unusual one of a medical book that is really worth \$4.50!

Bureau of Animal Industry, 19th Annual Report, for 1902. Department of Agriculture, Washington, D. C.

The volume contains, in addition to the papers of interest only to the agriculturalist, the following papers on medical subjects: The duration of the life of the tubercle bacillus in cheese; Recent experimental inquiry upon milk secretion; The physiology of milk secretion; Bovine tuberculosis and other animal diseases affecting the public health.

Spotted Fever (Tick Fever) of the Rocky Mountains. A new disease. By John F. Anderson. Bul. No. 14, Hyg. Lab., U. S. Pub. Health & Marine Hospital Service, Washington, D. C. The bulletin was issued in July and presents the results of a careful study of this rather new infection, with excellent illustrations, in color, both of the rash produced in the course of the disease, and of the probable organism in the red cells. Data concerning 121 cases are given.

Transactions of the Medical and Chirurgical Faculty of the State of Maryland, 105th Annual Session. The book does not contain either table of contents or index; consequently is not reviewed.

California Health Resorts. By Guy Hinsdale, Philadelphia. Published in the *Colorado Medical Journal*, October, 1903. Mentions Yreka, Red Bluff, San Francisco, Santa Barbara, Los Angeles, San Joaquin Valley, etc.

Publications of the Department of Agriculture: Olive Oil and its Substitutes. Tolman and Munson. "It is a matter especially worthy of comment that the California oils bought in the open market were all of superior quality, and that only two of the fifteen samples so obtained contained any oil other than olive oil. Of these two samples one was not labeled with the name of the manufacturer, but instead bore the name of the dealer."

Average Composition of American Food Products. This pamphlet gives extensive tables showing the amount of refuse, water, protein, carbohydrates, ash and fuel-value of a large range of foodstuffs. Excellent suggestions are also made as to the method of calculating diets.

Experiments on the Metabolism of Nitrogen, Sulphur and Phosphorus in the Human Organism. Reports some well-conducted experiments upon the digestion of various foods, composition of foodstuffs, feces, etc. Should be very valuable in connection with a study of dietetics.

Some Chinese Vegetable Food Materials. By Walter C. Blasdale, University of California. Bul. No. 68., Experiment Stations. A very careful scientific study of the question, giving much useful and valuable information of these, to us, new foodstuffs.

Renal Decapsulation as a Cure for Chronic Bright's Disease. By Franz H. Coe, Seattle, Washington. Read before the Washington State Medical Association, 1903. Reprinted from *Northwest Medicine*. A brief account of the operation, historically, with a report of two patients so treated by the writer, together with the discussion of the paper.

Should the Forests be Preserved? California Water and Forest Association, Mills Building, San Francisco, Calif. Copies can be had without charge by application to the Association. The great importance of forest preservation, from the sanitary standpoint alone, should be appreciated by every physician and his influence should be toward this object. A denuded watershed is not conducive to public health.

Chemistry of the Soils as Related to Crop Production. By Milton Whitney and F. K. Cameron, of the U. S. Department of Agriculture, and published by the Department.

MEETING OF THE SOUTHERN CALIFORNIA MEDICAL SOCIETY.

HELD AT REDLANDS, DECEMBER 2 AND 3, 1903

(Reported by H. P. HILL, M. D.)

President John C. King of Banning called the meeting to order and introduced Dr. T. M. Blythe, president of the local society, who delivered a short address of welcome.

Following the completion of the routine business of the society, Dr. M. D. Toland of Pomona, chairman of the Committee on Cutaneous Diseases, read a paper on "A New and Successful Treatment of Some Obstinate Skin Diseases." A brief history of the discovery of electricity was given, the discovery of the X-rays and their therapeutic value in diseases of the skin, especially in psoriasis, epithelioma, acne, eczema and lupus. A case of lupus in a man 80 years old was exhibited, which had involved both sides of the face, cured by exposure to X-rays. A case of epithelioma of lower lip of two years' duration, which had showed little tendency to heal after several exposures, was then shown. He had had remarkable results in many cases of obstinate eczema, lupus and epithelioma, and thought that in the X-ray, judiciously applied, good results could be obtained in nearly every case.

Dr. Champion of Colton in discussing the paper dwelt on the relative merits of static machines and coil; did not think acute eczema well treated with X-rays. In advancing epithelioma advised radical operation, and then use of X-ray if tendency to return.

Dr. Beckett insisted on an early radical operation in epithelioma.

Dr. Browning of Highland reported an obstinate case of acne.

Dr. Toland closed the discussion, saying that he was in favor of operation in epithelioma where admissible.

Dr. O. J. Kendall read a paper entitled "Sequela of Gonorrhea in the Female." He said that if gonorrhea were confined to the urethra, the disease would be without its terrible import. But following the urethra all contiguous tissues were infected and endometritis, salpingitis, oöphoritis, peritonitis and pelvic abscess might result. Except in acute stage the treatment was surgical and according to tissues infected.

Dr. Follansbee in discussing the paper said that the conditions resulting were protean and the cause of much invalidism. The treatment should be preventive as well as surgical, and appealed to the profession for a stronger stand for preventive treatment, and in the prevention of marriage during a period where infection was possible.

Dr. A. L. Macleish of Los Angeles read a paper entitled "The So-called Vernal Catarrh of the Conjunctiva." Vernal catarrh he considered a rare disease, neither catarrhal nor vernal, characterized by its persistency, resistance to treatment and excessive itching. He divided the disease into three types: First, mild form. In this form the epithelial layer is thickened and opaque and subconjunctival tissues of a peculiar orange color tint. There may or may not be a thin layer of mucous secretion; is viscid. Second type, more severe. There is a nodular hypertrophy of the tarsal conjunctiva forming pedunculated papillæ like a regular tessellated pavement. Third type. There are nodular growths at the limbus corneæ, chiefly lateral, encroaching on the cornea. Exacerbations are common and are the cause of the misnomer. The essential unvarying feature is hypertrophy of the epithelium and increase of the underlying connective tissue.

The differential diagnosis must be from catarrhal conjunctivitis and trachoma. The prognosis chronic and persistent; the treatment palliative and surgical.

Dr. B. F. Church of Los Angeles then read a paper on "Sympathetic Ophthalmia." He spoke of the difference between sympathetic ophthalmia and sympathetic irritation. Giving the theories concerning the production of sympathetic ophthalmia and its etiology. Sympathetic ophthalmia very resistant to treatment and enucleation not always successful or advisable. The disease fortunately is rare and develops from three weeks to five months after injury to the fellow eye. The onset is insidious—may be blindness with pain or without pain. Sympathetic irrigation is benign and may develop in a few days or years. It has no tendency to pass into inflammation and is relieved by enucleation. How it can produce sympathetic ophthalmia is not well understood.

Discussion of both papers opened by Dr. T. J. McCoy, who spoke of the rarity of vernal catarrh, and reported one case in which he did not at first recognize the diagnosis. Not definitely settled whether there is a distinction between sympathetic ophthalmia and irritation, or the same disease divided.

Dr. Miller spoke of ichthyol to alleviate the itching. Spoke of the question as to the manner in which sympathetic irrigation was produced. He considered the two diseases separate and advocated conservatism in treatment.

Dr. F. W. Thomas of Claremont read a paper on "Relationship of Diseases of the Chest to Those of the Nose and Throat." He dwelt on the results of downward extension of catarrhal conditions of the upper passages; of the result of difficult and unphysiological breathing, caused by stoppage of the nasal passage as by growths, deflected septum, the presence of adenoids in the vault of the pharynx, all producing mouth-breathers. He especially considered the relationship existing between tubercular laryngitis and tuberculosis of the lungs.

Dr. Babcock of Los Angeles read a paper on "How I Treat Suppurative Otitis Media." First, general history. Wash out the ear as well as possible with alcoholic solution boric acid for two or three days. Careful examination of the drum, eustachian tubes, post nasal space, inferior turbinates, etc. Then wash out with peroxide of hydrogen and dry. Careful examination again made; small amount of pus may be obtained by exhausting air with otoscope; small amount of necrosed bone may be found by careful probing in some cases; polypus removed with snare or alcohol; granulations receive alcohol; look occasionally for necrosed bone; small focus may be touched with pure carbolic and then with alcohol; strong silver solutions may also be used; blow dry boric acid into ear frequently.

Dr. Miller spoke of relationship of adenoids and adenoid disposition. Mouth-breathers prone to affections which may be derived from infection taken in in that way.

Dr. Babcock condemned practice of syringing by patients. Should be done through a speculum. Thoroughly wash and then use dry treatment.

Adjourned till 7 p. m.

EVENING SESSION.

Dr. Millsbaugh read a paper on "Complications and Sequelae of Typhoid Fever." He spoke of the differential diagnosis of perforation; the necessity of an early diagnosis was urged, so that operative interference would be of some value. He reported several cases to illustrate his points. A case of ante-mortem infection with gas bacillus was reported; a case of hemorrhage at the end of the third week was reported, with what he considered admirable treatment,

consisting of suprarenal extract; complete rest by shutting off milk diet and the use of morphine; cold to the abdomen in shape of ice coil. In post typhoid sepsis, after a correct diagnosis of the condition was made, he urged the use of solid food and getting the patient out of bed. A careful diagnosis was imperative between this condition and a relapse—recrudescence and malaria. In septic type the zig-zag temperature chart, chills and sweating were present; malaria must be excluded by blood examination for parasite and leukocytosis. In relapse diazo appears after disappearing, increase in size of spleen and reappearance of rose spots and temperature curve are suggestive. In the management of these septic cases small amounts of solid food should be given and increased gradually. If the patient gets worse he must be gotten up out of bed. Stimulation should be given p. r. u.

Dr. Barlow urged the necessity of an early diagnosis; in perforation, must diagnose early to operate early. Thought the management of post-typhoid sepsis should be less radical; should take into consideration anemia and nervousness as a cause of temperature.

Dr. Wing considered the treatment depended entirely upon diagnosis. If heart was all right the treatment outlined for sepsis was good.

Discussed also by Bullard, Cole, Black and Pillsbury.

Dr. R. L. Doig of San Diego read a paper, "Effects Upon After Life of Infancy and Early Childhood." The health of infants is surprisingly good in Southern California, when one considers the number of parents who have come to California for their health. The home training of children too often neglected and abused. From early infancy the child should be taught obedience and not allowed to rule the family. The necessity for this shows in the characters of children who have been pampered. As far as possible the physician should tactfully bring these points to the minds of mothers and fathers.

The paper was discussed by Dr. Follansbee and others, and it was suggested that it was a delicate matter to interfere in the control of other people's children.

Dr. L. G. Visscher read a paper on "Indigestion Relative to Diseases of the Heart." With a wide margin of cases of mixed nature it is possible to distinguish disturbances of the circulation caused by acute or chronic gastro-intestinal derangements and dyspeptic symptoms caused by diseases of heart and blood vessels. The treatment in both conditions is widely different and in order to get the most benefit both must be carefully considered. Especially is this the case in regard to the taking of fluids, taken too freely they will weaken the myasthenic stomach and by the increase of gas stagnation cause palpitation, intermissions, etc. The real damage is done, however, by overtaxing the right ventricle. Proper consideration should be given to this point when aneurysma or contracted kidney are found to be associated with chronic indigestion.

Discussed by Drs. Cole and Barlow of Los Angeles.

Dr. Elbert Wing read a paper "Concerning the Diagnosis and Treatment of Hemiplegia." Hemiplegia may be due to cerebral hemorrhage, embolism or thrombosis, diagnosis depending as much on the causes as on the symptoms. The paper dealt chiefly with spontaneous cerebral hemorrhage and its associated states—miliary aneurism atheroma and fatty degeneration. The etiological factors in embolism and thrombosis were enumerated. By means of charts a brief illustration of the motor tracts and centers were given. The differential diagnosis between the three forms of apoplexy and coma due to alcohol, uremia,

opium and diabetes was given. The fifteen minutes having elapsed, the treatment and indications for same had to be omitted.

In discussing the paper, Dr. Brainerd spoke of the difficulty in diagnosis between hemorrhage and embolism. Miliary aneurisms are result of arterial disease. Embolism due to cardiac disease. Thrombosis occurs at extremes of age. In hemorrhage there is always a decided shock, in thrombosis there are prodromal symptoms.

In prognosis the temperature is a fair guide. After the fall a continuous high temperature is unfavorable. Nystagmus and restlessness of limb are unfavorable signs.

Dr. F. D. Bullard read a paper on "The Serum Treatment of Diphtheria." Diphtheretic antitoxin does not have action on fixed toxin. Must be given to unite or render innocuous unfixed toxins. In cases of suspected diphtheria 1000 to 1500 units should be given, in mild cases 2000 to 3000, in severe 5000 or more. This should be repeated if no amelioration in mild cases in eighteen hours, in severe from four to twelve hours.

Always use concentrated serum. In cases of mixed infection with streptococcus use in conjunction anti-streptococcal serum 10 cc. every twelve hours. Local applications should be of antiseptic nature and constitutional treatment supportive.

Dr. Millsbaugh—Advisable to obtain a smear for immediate examination as well as a culture.

Dr. Toland, Jr., spoke of other bacteria causing membranes in throat.

Dr. Thomas—Klebs Loeffler bacilli are constantly found in the mouth and their appearance in culture is not always indicative of diphtheria.

Dr. Wing, in answer to Dr. Thomas, said that a culture taken from the throat of a person complaining of a sore throat, with or without membrane showing a growth of Klebs Loeffler bacilli, was proof that diphtheria was present.

Dr. Toland—We old fellows don't need the microscope to tell us when a patient has diphtheria. We go to a patient, say "Open your mouth," look in and see whether they have it or not. I have just finished my ninety-fourth case of diphtheria without a death in Pomona. I give 3000 units of antitoxin and repeat every six hours. I also give two grains of calcium sulphide a day to disinfect the blood, also give arsenate of strychnin. I have been interested to note how long after giving antitoxin the patient begins to feel better, and one patient that had been taken sick on a Monday and I saw on Friday felt better one hour after giving antitoxin and was in church on Sunday.

Dr. Cole—I have been wondering whether since Dr. Toland never uses a microscope, some of his ninety-four cases might not have been follicular tonsilitis.

Dr. Baird inquired whether there was a health officer in Pomona—to allow a patient suffering with diphtheria on Friday to go to church on Sunday.

Dr. Ide of Redlands said he thought it better to give 2000 units on the first day than 6000 on fourth or fifth day.

Discussion closed by Dr. Bullard. The meeting then adjourned till Thursday 2 p. m.

A reception was tendered the visiting ladies at the home of Mrs. Tyler on Wednesday evening.

Thursday morning those wishing to go were taken in carriages around Smiley Heights, the McKinley drive, and interested parties visited the settlement on the outskirts of Redlands for indigent consumptives.

Thursday at 2 p. m. meeting called to order by President King. After the election of a number of new members Dr. Walter Lindley reported the death

of Dr. Julius Crane, Santa Ana; Dr. Karl Schwalbe and Ross C. Kilpatrick, Los Angeles; Anthony J. Comstock, Ventura.

Dr. Mary E. Hagadorn read a paper on "Early Diagnosis of Extra Uterine Pregnancy." The paper was a plea for the continual lookout for this condition. Extra uterine pregnancy is no longer considered rare and can be diagnosed before rupture. Women should be educated to put themselves under medical supervision as soon as pregnancy is suspected. Cases with previous pelvic inflammation, irregular bleeding or colicky pains during the first weeks of pregnancy should be carefully examined. Diagnosis can and should be made before rupture. Report of case.

"The Relative Indications for Cesarean Section and Report of Case," Charles D. Lockwood, Pasadena.

Modern aseptic surgery has broadened the indications for Cesarean section. In this case mother had had an injury to thigh when young and for several years had had sennes leading from that region. The result was a deformed pelvis, contraction of the transverse diameter, necessitating a Cesarean section. Indicates the necessity of careful pelvimetry. A brief enumeration of various pelvic deformities and obstetric operations available were given.

Dr. Mattison in discussing Dr. Hagadorn's paper, spoke of the differential diagnosis between appendicitis and ruptured tube. Examine cases early where history of discharge. In speaking of Dr. Lockwood's case, spoke of relative merits of symphysiotomy, early induction of labor and Cesarean section. Craniotomy he considered a thing of the past.

Dr. Bicknell reported an eight months' case ectopic gestation delivered through rectum.

Dr. C. W. Murphy spoke of the control of hemorrhage by means of pressure on ovarian and uterine arteries. The relative merits of catgut and silk as a suturing material for uterus. Believed Cesarean section of value in eclampsia.

Dr. F. C. Shurtleff read a paper on "Fractures Involving the Elbow Joint." Fractures should be treated according to displacement of fragments, and prevention of loss of carrying angle. This in many cases can be best obtained by putting up in extended position—in other cases in right angle or more. Early motion productive of more harm than good. Report of several cases.

Dr. J. T. Stewart of Los Angeles read a paper on "Drainage in Abdominal Surgery."

Dr. LeMoyné Wills read a paper on "Fracture of Neck of the Femur," with report of case and skiagraphs.

Dr. W. W. Beckett of Los Angeles gave an interesting paper on the surgical treatment of floating kidney, detailing, with the use of cuts, the operation as performed by himself. Condemned the use of any mechanical means of support as dangerous and unscientific. Many of the nervous symptoms were allayed by operation and usually great relief from all symptoms was the result.

Dr. Lobingier, in discussing the papers, said: In fractures around the elbow joint certain deformities result, and these deformities will determine the treatment in any given case. The extended position as a usual treatment is not as good as an angle of 90° or 135° in the greater number of cases. The distance the patient falls is no indication of the amount of injury done. Must first determine the amount of separation of fragments and then can judge of the advisability of the extended position. In regard to nephropexy relief is obtained by the operation as a rule. Mechanical applications are unsatisfactory. Several methods were described. A reasonable normal position was what was aimed at.

In abdominal drainage we find less and less fre-

quent cause for its use. Early and correct diagnosis lessens the necessity for it. The rationale is to reach dependent areas. The method that will do that safely and avoid the least adhesions is the best. Fowler's position as spoken of by the author is very good. Infections of upper right quadrant are least favorable; of the pelvis more favorable. In regard to fractured hip the least interference possible gives best result. I am in the habit of using a wire basket splint.

Dr. Pahl—In regard to fracture of elbow the desideratum is to maintain the carrying angle, and this is best obtained in majority of cases by supine extended position and plaster of paris splints.

Papers were also discussed by Drs. Lockwood, Witherbee and others. The discussion was closed by Dr. Wills of Los Angeles. Meeting adjourned.

A banquet was tendered the association by the Redlands Medical Society in the evening. D. C. A. Sanborn of Redlands introduced Dr. Mattison, who acted as toastmaster, and a very pleasant evening ended the thirty-second regular semi-annual meeting of the S. C. M. S.

OTHER SOCIETY MEETINGS.

Alameda County.

Meeting called to order at 8:30 P. M., Tuesday, December 8, Dr. Hamlin presiding. Forty-four members were present.

The first paper was read by Dr. F. L. Adams, the subject being "Surgical Treatment of Perineal Lacerations."

He said that Emmet was the first to devise a successful operation for the treatment of this condition, but that the technique of his operation was so misunderstood and imperfectly performed that there was a question in his own mind whether his work had resulted in any ultimate good to humanity. However, his method, or some modification of it, is almost universally used to-day by the best surgeons. He reviewed the anatomy of the perineum, presenting charts showing the relation of the different structures, and classified lacerations into recent and old, open and submucous, complete and incomplete, stating that the submucous tear was very often overlooked by the obstetrician. He thought that very few primiparae escaped laceration, and it was his practice to exclude them by a thorough examination of the perineum and vaginal walls, using the gloved index or middle finger in the rectum to evert the posterior vaginal wall. Recent lacerations should be repaired at once, chromacized catgut sutures being used, except in cases of exhaustion or extreme loss of blood when the intermediate operation should be done. After explaining in detail the technique of the Emmet operation, describing, by means of charts, the various steps of denudation, placing and tying of sutures, the doctor described a modification of the Emmet operation which he had used successfully and which he thought was especially adapted to cases of long standing in which there is present complete retraction of the muscular and fibrous structures of the pelvic floor, with prolapse of the viscera. In this operation the denudation is similar to that of Emmet, but a deep dissection is made on either side, and the extremities of the torn muscles and fascia found and brought together by means of a buried continuous chromacized catgut suture. The submucous membrane is sutured over the muscle layer with either continuous or interrupted sutures.

The paper created considerable interest and was discussed very freely by many present.

Dr. McCleave called attention to the fact that many perineal tears could be prevented by placing the patient on her side during the second stage of labor. He commented on the operation as done by Dr. Som-

ers, and thought that it was one of the best yet advocated.

Dr. Ewer—I think it is inadvisable to do an immediate repair of a complete laceration, as infection is almost sure to occur and a poor result follow. Better wait and do the intermediate operation under more favorable circumstances.

Dr. Emerson considered it to be impossible in old cases to dissect out the different perineal muscles and suture the structures in layers, as the muscles become atrophied and attenuated.

Dr. Crowley stated that he had seen Dr. Adams do the deep dissection of the perineal structures with success. He thought it advisable to remove all scar tissue before suturing, and considered it to be good practice to stretch the anal sphincter before operating on the perineum, thus overcoming much of the patient's discomfort and lessening tension on the sutures.

Dr. Buteau spoke of the large number of operations that had been done for repair of the perineum and thought that each method had been more successful in the hands of its originator than in the hands of the general surgeon. He emphasized the importance of approximating the torn edges of the fascia, whether the retracted muscle was included or not.

Dr. Porter believed the Emmet operation to be the best yet, it meeting most of the requirements. He would advise repairing all recent tears at once.

Dr. Jeremiah Maher then read a very interesting paper on "Convulsions in Childhood." The doctor's paper was discussed by Drs. Buteau, Von Adelung, Holmes, Stratton, Pond and Rowell.

During executive session a communication was read in which the Alameda County Medical Society was invited to attend the meeting of the Alameda County Dental Association on January 6.

Drs. W. W. Purnell and W. F. Lynch were elected to membership in the society.

A committee consisting of Drs. Buteau, Stafford and Rowell were appointed for the purpose of raising a fund to aid the State Board in prosecuting all practitioners not complying with the State law.

J. M. SHANNON,

A. S. KELLY,

Publication Committee.

Alumni Association Medical Department University of California.

The Alumni Association of the Medical Department of the University of California held a special meeting on December 1, 1903, Dr. Geo. E. Ebricht presiding. The minutes of the last meeting were read and approved.

The report of the executive committee read and placed on file.

Dr. C. M. Cooper presented a case of Addison's disease. The case was discussed by Dr. Montgomery and Dr. Ebricht.

Dr. Lissner presented some pathological specimens from a case of ruptured aneurysm of the arch of the aorta.

Dr. R. Bine presented an enlarged spleen from a case of dysentery.

Dr. W. W. Kerr then outlined the story of the Medical Department of the University of California, touching on the obstacles the college has had to surmount in the past as well as in the present and calling attention to the interest taken in the college by some of the members of its faculty, particularly Dr. Beverly Cole.

Dr. H. M. Pond read a paper discussing the difference between the city and country practitioner.

Dr. Hamilton presented some specimens from a case of "pin worm."

The meeting then adjourned.

L. S. SCHMITT, Secretary.

California Academy of Medicine.

The regular monthly meeting of the Academy was held in the offices of Dr. Harry M. Sherman on Tuesday evening, December 22, 1903, President D. W. Montgomery in the chair, and twenty-one members present.

Dr. George B. Somers exhibited a large mass of molluscum fibrosum tissue recently dissected from a woman patient who died soon after the operation, the doctor being in doubt as to the direct cause of death, but giving as his opinion that it was probably partly through shock and partly sepsis. Discussion by Drs. Ophüls, MacMonagle and Terry.

Dr. F. B. Carpenter reported a post-operative death following hysterio-oöphorectomy. The patient made a satisfactory recovery from the anesthetic, but three hours afterward her respiration fell rapidly, artificial respiration employed, patient probably died from embolism. Discussion by Drs. Brunn, Kreutzmann and Ophüls.

Dr. H. Morrow being absent, the reading of his paper on "Malignant Syphilis" was postponed.

Dr. H. J. Kreutzmann read a paper on "Laceration of Peritoneum," which was discussed by Drs. Somers, Von Hoffman and MacMonagle.

Dr. Beverley MacMonagle exhibited a dissected perforated appendix and a specimen showing laceration of the vagina. The discussion on operative measures was by Drs. Wadsworth, Tait, Newmark, Brunn, Brown, Ophüls, Gross, Montgomery and MacMonagle.

The election of officers resulted as follows: President, Dr. Thos. W. Huntington (Dr. Montgomery declined renomination); vice-president, Dr. Beverley MacMonagle; secretary, Dr. Louis Kengla; treasurer, H. J. Kreutzmann.

Fresno County.

The regular monthly meeting of the society was held at the residence of Dr. T. R. Meux on December 1, the president, Dr. E. J. Couey in the chair and the following members in attendance: Drs. Barr, Hopkins, J. R. Walker, Hayden, Aiken, Hare, Nicholson, Meux, Martin, Manson, Couey, Gebhart, W. T. Maupin, Dunn, Rowell, Trowbridge, Davidson and Cowan.

The minutes of the previous meeting having been read and approved, the following names were presented for membership: C. J. Kjaerbye (University of Copenhagen, 1892); F. C. Galehouse (College of Physicians and Surgeons, San Francisco, 1902); J. N. Moradian (University of Illinois, Chicago, 1900). These names were referred to the board of censors for report at the next meeting.

The board of censors having reported favorably upon the following applicants, they were duly elected to membership: Geo. H. Bland, Clovis (College of Physicians and Surgeons, San Francisco); W. W. Cross, Visalia (St. Louis Medical College, Mo.), and S. C. White, Clovis (Rush Medical College, Ill.).

In the matter of Dr. Gerow of Laton, heretofore given until the December meeting of the board of examiners to obtain a license, a telegram from Dr. Dudley Tait notifying the secretary that Dr. Gerow had failed to present himself for examination, and urging prosecution, was read. The society was informed that Gerow had moved to Reno, Nev., and no action was taken.

Dr. Aiken of the committee of ethics here remarked that there were other physicians practicing in this

county who had not complied with the laws relating to the practice of medicine, inasmuch as they fail to take the required examination and procure the necessary license. It is the intention of the society to prosecute these illegal practitioners and the committee of ethics was instructed to investigate the matter.

It becoming known that the Board of Examiners was without funds to defend itself in the suits brought by Dr. Hodghead and others to have the board ousted, it was unanimously carried that the sum of \$50 be contributed by the Fresno County Medical Society for the purpose of assisting in defraying a part of the expense of defense.

Nominations for officers for the ensuing year being in order, the following names were placed before the society: President, G. A. Hare; first vice-president, J. L. Martin; second vice-president, P. Manson; secretary, Angus B. Cowan; assistant secretary, D. H. Trowbridge; treasurer, T. M. Hayden.

The society now being entitled to two delegates to the legislative branch of the State Society, Dr. Davidson was nominated as the second delegate. Dr. W. T. Maupin holds over.

The paper of the evening was entitled "Continued Fever," and was prepared and read by Dr. T. M. Hayden. The author remarked in opening that this was a very old and indefinite term, and has served to cover a multitude of ignorance, but in the San Joaquin Valley there is a form of fever that is very indefinite in its aspects and obscure in its nature. These cases are seen in the early autumn and have been called "Bilious Remittent Fever." Of course they are bilious, so far as a dirty skin and foul tongue are concerned; so is pneumonia, "and the fever remits." One term is no better than the other. The physician at first tells his patient it is a malarial attack, but in a few days the fever increases and adynamic symptoms appear and he adds the prefix "typho" and says it is a typhoid and malarial poison combined. The author's opinion is that the malarial plasmodium and the typhoid bacillus, while sometimes present in the same patient, do not form the above-mentioned partnership.

The history of these cases as narrated by Dr. Hayden follows: The illness begins quite abruptly, possibly with a chill; there is a marked absence of the prodrome of typhoid; the eyes are lusterless, skin muddy, tongue has a white, closely adherent shiny coat, but little bilious coloring; skin hot; pulse 90 to 95, and temperature 102.5° F; headache, backache and muscular soreness; bowels uncertain. Mercurials followed by quinine fail to break up the fever, and on the third or fourth day you find the fever severely "continuing" and the tongue as white and pasty as before. These fevers last from three weeks to two months, becoming intermittent after ten days to two weeks. The temperature finally reaches a subnormal point some morning, and convalescence is established. Typhoid symptoms are lacking in these fevers and the writer calls the disease the astivo-autumnal form of malarial poisoning. Dr. Hayden advised large doses of quinine during the remission, and if there is not a decided remission, to resort to pilocarpin and force one.

The discussion following the paper was a lively one, the majority of the members present believing these cases typhoidal in their nature, the typhoid adherents saying that typical typhoid was a rare thing in this valley; still in the cases described the ulcers were present.

After adjournment those present enjoyed an hour of social converse at the banquet board.

ANGUS B. COWAN, Secretary.

Humboldt County.

The regular meeting of the Humboldt County Medical Society was held in Eureka November 10, Dr. Felt presiding.

The fee bill as drafted by the committee was read and adopted by the society and a sufficient number of copies ordered printed.

Clinical cases were reported by Dr. McKibbin of Loleta and Dr. Felt of Eureka.

The paper of the evening was read by Dr. C. W. Mills of Arcata on spinal anesthesia, a copy of which will be sent to the STATE JOURNAL.

Dr. J. L. McLaren, one of the active and successful practitioners of Eureka, left there recently to take up post-graduate work in the East and Europe. On his return he will probably locate in or near San Francisco. Dr. McLaren, during his stay in Humboldt, worked always for the best interest of the profession. He was an active member of the Humboldt County Medical Society and the president and founder of the Sequoia Hospital of Eureka.

The regular meeting of Humboldt County Medical Society was held in Eureka, December 8, Dr. C. O. Falk presiding.

Dr. R. E. McKibbin of Loleta read a paper on Paraplegia.

G. N. DRYSDALE, Secretary.

Los Angeles County.

The meeting of November 6 was a very interesting one. The program was, first, paper by Dr. C. L. Magee, "The Care of the Pregnant and Parturient Woman." It was an instructive and well written paper. Second paper, by Dr. N. C. Dunsmoor, "The Care of the Child." This was a very practical paper, full of the modern aseptic theories and up-to-date views in the care of the newborn. Third paper, "The Pathology of Eclampsia," by Dr. E. L. Leonard, giving the latest views of prominent pathological research. Fourth paper, "Eclampsia," by Dr. C. W. Murphy, was devoted to the treatment of this distressing and too often fatal complication of the parturient state.

The program was a very complete symposium on the obstetrical art and science. The discussion was opened by Dr. M. L. Moore and was very thorough, and joined in by many of the members.

Dr. Leon Roth reported a case of Eclampsia.

Dr. George Lasher exhibited a very large sarcomatous tumor of the kidney from a child aged 1 year.

Under new business the secretary read a communication from the Pomona Valley Medical Society in which it was stated that that society had adopted the Constitution and By-Laws of the Los Angeles County Medical Association and had voted to become the Pomona Branch of the County Association. This report was accompanied by a list of 14 members.

Dr. Wm. R. Molony's and Dr. Wm. R. Perry's applications for membership were received.

Drs. A. T. Newcomb and C. B. Nichols were elected to membership.

The attendance was over 60.

The program of November 20 was as follows: 1st, report of and exhibition of specimen of a case of aneurism of the aorta, by Dr. Arthur Godin, discussed by Drs. Lobingier and J. M. King, Lockwood and others. 2d, report of and exhibition of specimen of kidney removed for hematuria pain and pyuria, and which had undergone sarcomatous change, by Dr. A. S. Lobingier. 3d, paper by Dr. C. D. Lockwood, "Nephrectomy for Nephrolithiasis." These papers were discussed by Drs. Wm. Lewis, Wills, Lasher,

King, Beckett and others. 4th, paper by Dr. George Abbott of Pasadena, "Here and There in Medicine and Surgery."

New business. The nominating committee, in lieu of the council (there being none as yet), retired and nominated officers and council for the coming year.

Drs. Wm. Molony, Wm. R. Perry and W. P. Mills-paugh were elected to membership. Four new applications for membership were received.

Dr. Le Moyne Wills moved that \$200 be sent to San Francisco, as this County Medical Association's contribution to the "Medical Defense" fund, to be used in defending suits brought against the Board of Examiners. It was seconded and carried.

The following letter was received:

PASADENA, Cal., Nov. 16, 1903.

To the Los Angeles County Medical Association, Greeting:

At a meeting of the Pasadena Medical Society, held this evening, it was voted unanimously that we adopt the Constitution and By-Laws of the Los Angeles County Medical Association and become the "Pasadena Branch" of the same association. CHAS. D. LOCKWOOD,

J. E. JAMES, Secretary.

President.

The letter was accompanied by a list of forty members, and was by vote accepted.

C. G. STIVERS, Secretary.

Merced County.

The Merced County Medical Society met in the office of Dr. H. N. Rucker, Thursday, December 3, at 8 p. m.

Present—Drs. H. N. Rucker, E. S. O'Brien, W. A. Whitlock, H. De Loss and W. E. Lilley.

New Members Elected—Drs. James L. McClelland, Josephine S. McClelland and Charles F. Wade of Los Banos.

Dr. Rucker took the subject of illegitimate drug business. Taking the ground that the physician injures himself greatly by prescribing so many of the new proprietary preparations, that are using the physicians merely as advertising mediums or stalking-horses to get to the public; encouraging counter prescribing by the druggist, and injurious self-medication by the public.

The discussion developed quite a strong sentiment that the druggists were not using the physicians fairly, and that in self-defence the physicians should do most of their own dispensing.

The meeting adjourned to meet January 7, at the office of Dr. O'Brien.

The society then, at the invitation of Dr. Rucker, betook themselves to a nearby restaurant when oysters, cigars and a few good stories made the evening a very pleasant as well as a profitable one.

W. E. LILLEY, Secretary.

Monterey County.

Organized December 9, 1903.

In response to a call from the Board of Trustees, a meeting of Monterey County physicians was held at Salinas, on Wednesday, December 9, to organize a county society. Dr. Philip Mills Jones, who was requested by the Trustees some time ago to continue his work of organization of county societies, attended the meeting to represent the State Society and aid the Monterey men. Drs. Abbott, Brumwell, Craig, Edwards, Gordon, Grimes, Molgaard, Parker, Rankin and Ritchie attended the meeting, and Drs. Cassel, Majors, Stafford, Trimmer and Westfall sent word that they could not attend, but wished to be enrolled as charter members. The meeting was called to order by Dr. Jones, and Dr. Edwards elected temporary chairman.

Dr. Brumwell was elected temporary secretary. Dr. Jones presented and read the standard constitution and by-laws, recommended by the A. M. A. and the Trustees of the State Society, and on motion, the Monterey County Medical Society was organized, and the constitution and by-laws adopted as read. On motion, the first Saturday of each month was made the meeting day, and the hour fixed at 8 P. M. On motion, the charter was declared open for charter members until the expiration of 60 days; after that time the initiation fee will be \$5. The following officers were elected: President, Dr. Thomas C. Edwards; Vice-President, Dr. Adam M. Ritchie; Secretary, Dr. Dorus Brumwell, of King City; Treasurer, Dr. John Parker; Censors (for one, two and three years as named), Drs. Rankin, Parker, and Molgaard. Delegate, Dr. Brumwell; alternate, Dr. Edwards; second alternate, Dr. Grimes. On motion the Secretary was instructed to write to the Secretary of the State Society asking for affiliation. On motion dues of \$2 a year were fixed and dues for 1904 declared payable. On motion, the society decided to meet next month at the Bardin House parlors, Salinas. The society then adjourned.

This is the eighth county society that has been organized through the efforts of the Trustees, or rather, through the work of the editor, at the request of the other members of the Board of Trustees. In every case it has been found that the physicians of the counties were desirous of having county organizations, but doubted the possibility of perfecting and maintaining an organization. When it is seen that county societies are very easily organized, and that the work, if systematically undertaken, is not difficult, the society is soon a *de facto* organization. Nearly all of the regular physicians of Monterey county have at once enrolled themselves as members of this society, and doubtless most of the others will do so before the end of the sixty days limit. The Trustees extend the heartiest greetings to the new society, and wish the physicians of Monterey county every success in their new organization, and in its work. They, as well as all other county society members, should remember that what really does the most good is to meet together, to exchange actual and practical ideas and experiences, and to have a pleasant social gathering. The break in routine work, and the relaxation that comes from it, is worth a great deal more than the average man thinks. Try it and see.

Napa County.

The regular meeting was held at Calistoga on December 1, and was well attended and very profitable.

The paper of the evening was read by Dr. M. A. ApLynn of Napa, the subject being "Tuberculosis of the Mammary Gland."

Discussion by members present: Drs. H. L. Parish, W. H. Porter, W. L. Blodgett, C. E. Winslow, E. E. Stone and J. L. Arbogast.

The next meeting will be held in Napa.

J. L. ARBOGAST, Secretary.

Orange County.

The Orange County Medical Association met in regular session Tuesday evening, December 1, Dr. R. A. Cushman read a very comprehensive and interesting paper on "Entozoa." The doctor especially brought out the importance of physicians in Southern California being able to recognize the presence of and properly treat the uncinaria. He states that the climate and atmospheric conditions were peculiarly favorable for their propagation.

H. S. GORDON, Secretary.

Riverside County.

The Riverside County Medical Society met at the home of Dr. C. S. Dickson on Monday evening, December 14. Present, Drs. Kendall, Parker, Van Zwahlenberg, Outwater, Clarke, Baird, Girdlestone, Martin, Dickson and Roblee. The meeting was opened by the vice-president. The minutes of the previous meeting were read and approved.

The addition to the constitution of Article III, Section 5, proposed at the last meeting, was adopted on a motion made by Dr. Van Zwahlenberg and seconded by Dr. Parker. The addition reads as follows: "All physicians doing lodge practice are hereby declared to be ineligible for membership in this society. This section is not intended to exclude those who examine applicants for membership in lodges at fee-bill rates."

It was moved by Dr. Clarke and seconded by Dr. Baird that a committee of three be appointed by the chair to draw up resolutions approving the cause of the State Board of Examiners in the matter of the attack now being made on our medical law, with full power to act. The chair appointed Drs. Roblee, Parker and Baird to act on this committee.

Dr. Baird then read a paper on "The Role of Animals and Insects in the Spread of Disease." He took yellow fever as the type showing most conclusively how the mosquito carries this disease, and that the fomites are comparatively not dangerous.

Dr. Roblee then read a paper on "The Acid Fast Bacilli." He reviewed the recent studies upon this group, showing how easily they can be confounded with each other and their diagnostic peculiarities. He also reviewed the recent discussions as to their being intercommunicable, especially the various forms of tuberculosis. This was followed by a microscopic demonstration of a number of these germs.

The committee reports the following resolution:

Resolved, That the Riverside County Medical Society hereby condemns the attack now being made in the courts upon our present medical laws and extends its hearty support to the State Board of Medical Examiners in the efforts it is making toward the upholding of these laws. And it is further

Resolved, That it is the wish of the members of this society that the trustees of the Medical Society of the State of California shall apply such funds as they have in hand to employ counsel and use every means possible in the defense of our present medical laws.

Mrs. Dickson served delicious refreshments. It was voted to accept Dr. Outwater's invitation to meet at his house next month. Meeting adjourned.

W. W. ROBLEE, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. H. H. Look on November 24. Dr. H. L. Nichols occupied the chair during the first part of the meeting and later Dr. Ross, the president, presided.

The resignation of Dr. J. S. Boyer was received and accepted, Dr. Boyer having left town.

A motion was carried that the physician to read the annual paper at the meeting in March be chosen at the December meeting.

The society then indulged in a free discussion of vaccination and kindred subjects suggested by the present smallpox epidemic.

Dr. J. H. Parkinson said that as physicians we should impress upon the public that quarantine and disinfection are only secondary matters, and that the proper method of dealing with smallpox is by vaccination. We know positively and absolutely that the disease can be prevented by thorough vaccination, that the preventive measure is harmless, and that we should earnestly impress this upon the people.

Dr. G. L. Simmons said that it would be well at this time to impress upon the people the necessity of vaccination, and to emphasize the truth of its preventive influence over smallpox. By demonstrating the fact that persons fully vaccinated were not affected by smallpox, he felt that there would be a universal demand for vaccination.

Dr. J. L. White said that during the past two years there had been from time to time a number of young physicians who had had charge of the pesthouse. They had lived in the building and had been in constant association with the sick, yet none of them had taken the disease, because all had been thoroughly vaccinated. He had been in the habit of ascertaining whether any of the patients admitted to the pesthouse had been vaccinated, and had only found one case, that of a boy of 12, who could show any evidence of having been successfully vaccinated.

Dr. H. N. Nichols said he believed there were very few children in the public schools unvaccinated. He was at present investigating the matter, under instructions from the Board of Health, and would soon have exact figures. Vaccination was the main preventive for smallpox and should be encouraged by every medical man.

Dr. W. E. Briggs believed that we were now suffering from smallpox among the unvaccinated largely on account of the heresies of anti-vaccinationists. It should be prominently brought forward that very few of the cases occurring in the city could show any evidence of vaccination, as this fact would have more weight than anything members of the society might say.

Dr. A. M. Henderson said whenever the society had placed itself on record in matters affecting the general welfare of the community, its opinion had been given due weight. He believed that this matter should be brought to the attention of the public in the same manner as the society's discussion of the subject of water pollution. While the preventive influence of vaccination was well known, it could not be too earnestly impressed upon the public.

Dr. N. K. Foster, Secretary of the State Board of Health, said vaccination is the only sure means of preventing smallpox at our command, and its efficacy in this respect has been proven beyond a doubt. In connection with the present epidemic throughout the State, where he had been he ascertained the facts as to whether the persons affected had been vaccinated, and he could safely say that in 99 per cent of the cases they had not. He agreed with the views of Dr. Parkinson as to the advisability of placing this matter plainly before the public. If every member of this society and physicians generally would exert their influence in strengthening public sentiment, and show conclusively the good effects of vaccination, the people would not object. He was glad to say that in the northern part of the State the anti-vaccination sentiment was not strong. In Southern California, he regretted to say, there was a good deal of opposition to this most necessary measure.

Dr. H. H. Look said that some years ago, when acting as inspector for the State Board of Health, he had occasion to examine a large number of cases from Bakerfield to the Oregon line. Among all these he could not recall a single case, vaccinated within recent years, that had contracted the disease. When we recall the ravages in the past and its enormous mortality, it was difficult to see how any intelligent community could object to the only means by which it has been possible to control the scourge. The profession should engage in missionary work in this direction, so that the public would voluntarily seek vaccination instead of questioning its efficacy.

Dr. J. A. McKee thought that many of the cases occurring in persons said to have been vaccinated were due to the old form of vaccination certificates, where it was customary to vaccinate a child and at the same time issue a certificate of vaccination. There was, of course, no evidence of protection. He knew of instances where, after smallpox had appeared in a family and the remainder of the household had been vaccinated, there had been no further cases.

Dr. F. L. Atkinson said he thought this is the method we should pursue in getting the subject before the people. Everyone knows from the history of the disease that vaccination is the only rational method of stamping it out. I am on record in this regard in the society. I was

J. B., age 41 years, was seen by me July 2, 1903. He had been treated by his physician for about four months with sublimate iodid mixture internally for ulcers in his nose of syph. nature. A few years previous he had fallen on his nose, which is, since then, crooked. For last two months noticed a decrease in sight. Two weeks ago left eye became suddenly blind, eight days ago had to stop work as a carpenter, three days ago became suddenly totally blind. St. pr. Sickening stench from nose. After removal of a large loose necrotic bone, septum showed in center perforation about one inch in diameter, the border covered with granulations. Amaurosis, pupils 6 mm. not reacting. Right eye disc slightly gray. Left eye disc hazy, streaky hemorrhages inward. In spite of strong specific treatment amaurosis remained unchanged and now we see ophthalmoscopically a clear picture of atrophy of optic nerve. I have given the patient intravenous injections of cyanide of mercury, one centigram, and even two, a day.

Dr. Brady—May I ask Dr. Pischel the field of vision in his case? I am, at present, treating a patient with a very large central scotoma and marked peripheral contraction. Both discs very hazy, somewhat swollen and pale grayish pink. V. R. & L.=6/200. He gave a history of eating sulphur used for bleaching dried peaches, also of exposure to cold with resultant facial neuralgia. Everything appeared of a bright yellow color. When under observation for three weeks, macular syphilides appeared on forehead and vertex, accompanied by mucous plaques on the mucous surface of the lips. After mercurial remedied V. R. & L.=20/40. Dr. Brady also spoke on salivary calculi.

Salivary calculi are composed mainly of the phosphates of calcium and magnesium, with a small amount of organic matter. Under the tip of the tongue small concretions are most frequent. A tenable hypothesis for their frequent appearance in the ducts of Wharton and Bartholin is the greater viscosity of the secretion of the submaxillary and sublingual salivary glands compared to the more watery secretion of the parotid. The use of acid, pungent or saccharine articles of food usually produced disagreeable symptoms.

The first patient suffered with sub-acute tonsillitis and with enlarged and tender submaxillary lymph nodes. I probed the ducts but failed to locate any obstruction. The patient complained still of a prickling feeling under the tip of the tongue. Following instructions, she ate pickles at breakfast and presented herself two hours later with a marked swelling under the angle of the jaw on the right side. Probing detected a mobile round body 1 mm. from the orifice. Splitting the duct with a canaliculus knife an ovoid concretion dropped out of a small lateral diverticulum. This had acted as a bail valve, giving trouble only in case of sudden increased secretion. The second specimen was larger, fixed inside the duct near the orifice, easily detected and readily removed. Later a man consulted me for a sticking sensation on the right side of the frenum of the tongue. Passing a fine forceps into the duct I extracted a small piece of a bristle from a tooth brush encrusted with salivary deposit. The bristle served as a nucleus and, if left, would have developed into a larger sized concretion.

Dr. Deane showed a calculus that he had removed from Wharton's duct. There was great swelling of the submaxillary gland and the calculus was removed by splitting up the duct the shape of which it had assumed. It was two and a half centimeters long.

Dr. Frederick—Some months ago a man 52 years old consulted me for a swelling on the left side of the neck. The region was that of the left submaxillary gland, and the swelling and hardness were such that a malignant growth was thought of, especially as the

patient was rather cachectic looking. He gave a history of gradual onset, slow growth and considerable pain in the tumor and the left tonsil. Some pus was seen coming from a small opening in the floor of the mouth in front of the anterior pillar. An incision at this point gave vent to a small amount of pus and the probe came upon a hard mass, which proved to be the calculus which I here show you. You will see, by comparing it with the two just shown you and those you have yourself seen, that this concretion is of unusual size. It is 15 mm. long, 10 mm. wide, and weighs 20 grains. After removing the calculus the swelling subsided in about a week, and the pain disappeared. Some induration of the surrounding tissue was still present when the patient returned to his home in the country, and as I have not heard from him since, I suppose he is doing well.

Dr. Eaton described a case of calculus of Wharton's duct. The patient, a man of about 30, came to him complaining of pain under the right side of the tongue. On examination, Wharton's duct was seen projecting forward like a quill, and was red and inflamed. A whitish body was seen, and on dislodging this, which proved to be a calculus the size of a pea, the saliva spurted in a stream from the mouth for about two feet.

Dr. Brady showed a specimen of cyclocephalus in a full-term calf, showing a perfect median solitary globe with no sign of a proboscis or median furrow above, as a remnant of the nose. There was also an arrested development of the naso-pharynx. A single optic nerve piercing a median optic foramen leads back to what appears to be a fusion of the thalamus and anterior corpora quadrigemina on the left side. There is marked aplasia of the brain. The medulla, pons and cerebellum together with the corpora quadrigemina occupy about 1/3 of the cranial cavity. Nothing was found of the cerebral hemispheres, the remaining 2/3 being occupied by a hydrocephalic sac, its walls being formed by the dura. The monster was born alive, but killed by the owner two hours after birth.

San Joaquin County.

The regular meeting of the San Joaquin County Medical Society was held in the offices of Dr. W. M. S. Beede in the Hale building, Stockton, on the evening of November 27, and was well attended. Dr. B. F. Ray presided and Dr. Barton J. Powell acted as secretary. Dr. W. M. S. Beede read a paper entitled "Medical Nomenclature" wherein he called attention to the necessity of accuracy in the designation of medical terms, especially in the matter of registration of births and deaths.

Dr. H. W. Taggart addressed the gathering upon the subject of "Psychical Suggestions in Medicine." Both subjects were thoroughly discussed with great evidence of enthusiastic interest. After the serious work of the session was completed the members were entertained at supper by Mrs. Beede, assisted by Mrs. Taggart. It was one of the most interesting and enjoyable sessions the San Joaquin Medical Society has ever held.

BARTON J. POWELL, Acting Secretary.

Santa Clara County.

At the stated meeting of the society held December 16, the attendance was unusually large. Those present were entertained by two very interesting papers; the first by Dr. L. V. Saph, in which he recited a clinical case of purpura hemorrhagica to which he had recently been called in consultation. The other by Dr. G. F. Witter, whose subject was "Local Anesthesia,"

illustrated by drawings and practical demonstrations of cocaine injections in the presence of the audience. Both papers were well received and freely discussed.

J. LAMBERT ASAY, Secretary.

Santa Cruz County.

Organized December 22, 1903.

In response to a call sent out by the organizer appointed by the Board of Trustees, the following physicians of Santa Cruz County met at the St. George Hotel, Santa Cruz, at 8 p. m. on the 22d of December, and organized the Santa Cruz County Medical Society, and by motion requested affiliation with the State Society: Drs. Bush, Christal, McGuire, Hedgpath, Pope, Phillips, Priestley, Vaux and Watters. Those who could not attend the meeting, but had asked to be enrolled as charter members, were Drs. Anderson, Beebe, Bellamy, Burbank, Clark, Congdon, Green, Keck, Knight, Emma Pope and Rodgers. The meeting was called to order by Dr. Philip Mills Jones, trustee of the State Society, and Dr. Vaux elected chairman and Dr. Pope secretary. Dr. Jones then explained the purposes and method of organization, and read the constitution and by-laws recommended by the A. M. A., and the trustees of the State Society. On motion, it was decided to organize the County Society by adopting the constitution and by-laws as read. On motion, the chairman appointed a nominating committee of three who retired and prepared nominations for officers for the ensuing year. The committee then reported, and on motion the secretary was instructed to cast the ballot of the society for the nominees, as follows: President, Dr. Exeter P. Vaux; vice-president, Dr. Spencer C. Rodgers; secretary, Dr. Saxton T. Pope; treasurer, Dr. Ira C. Bush; delegate, Dr. S. T. Pope; alternate, Dr. W. R. Congdon; censors, for one, two and three years, as given, Drs. Phillips, Christal and McGuire. On motion, the secretary was instructed to write to the secretary of the State Society, asking that the Santa Cruz County Medical Society be accepted in affiliation with the State Society. On motion, the next meeting place was set for Santa Cruz, the first Monday in March. On motion, the society decided to meet the first Monday in the months of December, March, June and September. On motion, the roster for charter members was left open until the next meeting, in March, and the secretary was instructed to notify all eligible physicians in the county of the organization, time and place of next meeting, and invite those who have not joined to do so. The society then adjourned.

There is a spirit of rivalry—sometimes perhaps of jealousy—existing between the physicians of Santa Cruz and Watsonville, two fine cities not very far apart. Now is the opportunity to make this spirit of rivalry of some real practical value. Let the physicians of these two communities strive to see which can produce the better showing in membership, in loyalty to the profession which they all serve, and in the upbuilding of their county society. Let all strive, not for the aggrandizement of either community, for both are good places to be “at,” but for the improvement and the strengthening of the profession of medicine in Santa Cruz County, and for a good, solid, friendly and valuable County Medical Society, where all may meet on common friendly ground, and where all differences of opinion may be thrashed out and

settled. The Board of Trustees wishes you every possible good wish in your county organization, and not only a happy and prosperous New Year, but a never ending succession of them, each more prosperous than the one that has gone before it.

Sonoma County.

This county society is making brilliant progress and fully recognizes the importance and advantages of organization and affiliation. The following notice sent out by the efficient secretary, Dr. Mallory, for the meeting here reported is a model.—ED. JOURNAL:

SONOMA COUNTY MEDICAL SOCIETY—FORTY MEMBERS.

Dear Doctor—Don't forget our annual meeting on Thursday, December 10, at 8 p. m., Eagles' Hall, Santa Rosa, Cal. Fine paper and discussions of the same. Election of officers and committees.

The 10th is the last day that the roster will be open. If you can't come send your name before or at that time, and you will be a charter member, Sonoma County Medical Society, member of State Society; in line for American Medical Association, receive OFFICIAL REGISTER OF PHYSICIANS AND SURGEONS OF STATE OF CALIFORNIA, which is just out (we have received a copy for each member that belonged to the Society in October), will receive a STATE MEDICAL JOURNAL, all for \$2.00, which pays for 1904. But the 10th inst., next Thursday, is the last day for charter members; then the price is \$5.00, which includes dues. The Official Register of Physicians and Surgeons of California alone to non-members will cost \$2.25, besides your membership in State Society and STATE MEDICAL JOURNAL. (Every doctor in California should take this scientific journal.) Now, Doctor, we want you to send in your name and yourself be present on Thursday evening, December 10. Fraternally, G. W. MALLORY, M. D., Secretary.

The Sonoma County Medical Society met in Eagles' Hall on December 10, at 8 p. m., M. M. Shearer, M. D., presiding.

After reading of minutes and communications, Dr. R. A. Forrest of Occidental was introduced. His paper, entitled “The Emotions in Relation to Disease,” was instructive and valuable to our profession, as the writer showed a deep insight into the hidden or real self. All physicians would be benefited to hear the paper. This was followed by a discussion by Dr. Stratton of Healdsburg. Dr. Stratton ably discussed the mind over body, etc.

Dr. Stuart gave many valuable hints in a ten-minute talk on the subject, saying that emotions are not always detrimental to patient, saying that school teaching should embody psychology.

Dr. Henslee took up the discussion, but owing to the election of officers the general discussion was postponed to the meeting January 14, 1904, in same hall.

The following officers were elected to serve for the ensuing year:

J. W. Jesse, M. D., Santa Rosa, president; George Ivancovich, M. D., Petaluma, vice-president; G. W. Mallory, M. D., Santa Rosa, secretary; J. H. McLeod, M. D., Santa Rosa, treasurer. Censors—A. McG. Stuart, M. D., one year; J. W. Sewall, M. D., two years; M. M. Shearer, M. D., three years. Delegates—George Ivancovich, M. D.; E. M. Yates, M. D. Alternates—R. M. Bonar, M. D.; W. A. Barmore, M. D. President Jesse appointed Drs. A. M. Thomson of Sonoma, Smith McMullin of Petaluma and J. W. Kerr of Sebastopol the Committee on Public Health and Legislation.

Santa Rosa was chosen as the permanent meeting place with option to meet at other localities during the year if thought advisable.

The following named have been added to the roster since November meeting: Drs. Edward Gray, Eldridge; S. M. Rohr, Santa Rosa; J. R. Nott, Lakeport; George F. Wells, Boonville; R. E. Boone, Santa Rosa; H. O. Brink, Lakeport and E. G. Bennett, Petaluma.

The meeting adjourned at a late hour.

G. W. MALLORY, Secretary.

COMMUNICATIONS.

FERNDALE, Cal., Dec. 8, 1903.

To the Editor of the State Journal:—On page 398 of the December number of the STATE JOURNAL, editorial department, I read under head of "A Title of Honor," that it is a debatable question as to whether or not there are too many doctors of medicine.

Will you kindly inform me through the columns of the JOURNAL what part of this question is debatable?

With at least seven institutions in our State actively engaged in grinding out M. Ds. how could there fail to be a most ridiculous oversupply of doctors?

Add to that the fact that there is one non-resident or foreign regular physician, to say nothing of Homeopaths and Eclectics, to every 700 inhabitants, duly registered and at liberty to enter practice in this State, should the chance offer, and to my mind it leaves still less chance for debate.

Will the present oversupply of medical colleges tend to increase sound medical education or will the mad struggle for existence lead these schools into disreputable actions, derogatory to the profession and will they not eventually become mere "doc." factories?

Again, kindly inform me how the dignified self-respecting physician is to be held responsible for the manners of his illbred neighbors. While it is almost a national custom to address the doctor as "Dawk," what is the self-respecting physician going to do about it? Very truly yours,

H. S. DELAMERE, M. D.

H. S. D.—Please, you are mistaken. We did not say that it is a debatable question whether there are too many doctors or not; we said, "it may be a debatable question." It might be, but it isn't—in our opinion. The only way to stop the too great increase is to raise the standards very high; and if the standards are raised very high, there is at once a great howl. As witness the suits against the constitutionality of the law regulating the practice of medicine. As to how to avoid being called "dawk," that is another question. You might, perhaps, have a lot of slips printed of the editorial in question, and when the epithet is applied, hand out one of these cards.—Ed.

Pure Water for Ithaca—The turbine pumps which deliver water to the new Fulton plant of the Ithaca Water Company were set in motion and the citizens of Ithaca and the students of Cornell are assured of an abundant supply of pure water. Although tests had been in progress in the plant several days, no announcement was made until yesterday that it was ready for operation. Six months ago Cornell loaned to the Ithaca Water Company \$150,000 for the building of the purification plant and work has been continuous since. The water, as soon as delivered to the receiving wells, is charged with a solution of sulphate of alumina, which forms a white, flaky precipitate. The water is then passed into coagulating basins, where 70 per cent of its impurities settle. It is then passed through six filters of a capacity of 3,000,000 gallons daily.—*Jour. A. M. A.*

BOARD OF MEDICAL EXAMINERS.

The following list is that of the candidates at the last examination of the Board of Examiners. The (?) indicates that on the record furnished the Publication Committee no date of graduation was given. The (*) refers to the fact, as stated, that this was the second examination taken.

Examination December, 1903.

PASSED.

Albany Med. Coll., N. Y., '87, 81 $\frac{5}{8}$ %.
American Med. Missionary Coll., Ill., (?), 77 $\frac{1}{2}$ %.
Bellevue Hosp. Med. Coll., N. Y., '69, 75 $\frac{1}{2}$ %.
Coll. Phys. and Surg., Cal., '02, 78 $\frac{2}{3}$ %.
Coll. Phys. and Surg., Ill., '01, 77 $\frac{1}{4}$; '03, 83 $\frac{2}{3}$ %.
Coll. Phys. and Surg., N. Y., (?), 77 $\frac{1}{3}$ %.
Cooper Med. Coll., Cal., '98, 83 $\frac{2}{3}$; '03, 78 $\frac{1}{2}$; '03, 78 $\frac{1}{2}$; '03, 77 $\frac{1}{4}$; '03, 75 $\frac{1}{2}$ %.
Detroit Med. Coll., Mich., '76, 75; '02, 78 $\frac{1}{2}$ %.
Hahnemann Med. Coll., Cal., '03, 80 $\frac{2}{3}$; '03, 81 $\frac{1}{2}$; '03, 77 $\frac{2}{3}$; '03, 81 $\frac{2}{3}$; '03, 77 $\frac{2}{3}$ %.
Hahnemann Med. Coll., Ill., '03, 82 $\frac{1}{3}$ %.
Harvard Univ., Mass., '91, 84 $\frac{1}{2}$; (?), 82 $\frac{1}{4}$ %.
Ill. State Board of Health, Ill., '98, 83 $\frac{2}{3}$ %.
Jefferson Med. Coll., Pa., '01, 81 $\frac{1}{2}$ %.
Johns Hopkins Univ., Md., '02, 78 $\frac{2}{3}$ %.
McGill Univ., Canada, '99, 80 $\frac{2}{3}$ %.
Med. Coll. of Ohio, '80, 85 $\frac{2}{3}$ %.
Northwestern Univ., Ill., '02, 82 $\frac{1}{3}$; '03, 83 $\frac{1}{3}$; '03, 80 $\frac{1}{2}$ %.
Royal Coll. of Surg., Eng., '95, 85 $\frac{1}{3}$ %.
State Univ., Iowa, '83, 75 $\frac{1}{2}$ %.
Univ. of California, '00, 76 $\frac{2}{3}$; '02, 86 $\frac{1}{2}$; '03, 82 $\frac{1}{2}$; '03, 83 $\frac{1}{2}$; '03, 84 $\frac{1}{2}$ %.
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THE EYES OF SCHOOL CHILDREN.

(Continued from page 407 December JOURNAL.)

Astigmatism—Test each eye separately with Pray's astigmatic chart.

With the normal eye the letters appear of equal distinctness and blackness.

If astigmatism be present, to any extent, certain letters will stand out sharp and black. Others will appear less distinct and more or less blurred. Ask the pupil which letters are blackest—stand out best. The lines of the letters, which are plainest, mark out the meridian of the eye which focuses the lines on the retina.

Astigmatism is very common, and the eye overcomes a small amount without trouble. Astigmatic eyes otherwise normal will not see details well at a distance. The leaves of trees will seem mingled together in a mass. The letters of books will tend to run together or seem indistinct in certain directions on the page, and stand out plainer at or near right angles.

Record astigmatism in school register in same column as visual fraction for right and left eye, as follows: 20/20 (a), the (a) meaning astigmatism.

Muscular Imbalance—A: Lateral deviation. (1) Esophoria. (2) Exophoria.

Place the child 20 feet from a lighted candle. Hold a Maddox rod (piece of cardboard about $1\frac{1}{2} \times 1$ inches with slit 1 inch long, 1-16 inch wide, in which is fixed a small glass rod, of uniform diameter) horizontally, in front of one of the eyes. The rod will change the candle light into a narrow vertical band.

The eye before which the rod is placed will see a narrow vertical band. The other eye will see the candle. With both eyes, if the muscular balance is normal, a vertical band of light will pass through the candle.

If there is muscular imbalance (lateral deviation) the vertical band of light will be either to the right or to the left of the candle.

1. Esophoria (eyes turned inward abnormally): When the band of light is upon the side of the candle indicated by the eye before which the rod is placed, using the words *right* and *left*.

2. Exophoria: When the band of light is upon opposite side.

A small amount of esophoria is to be looked for in the far-sighted eye, and is not a disadvantage. Exophoria, however, in connection with far-sightedness, is a matter of much concern.

B—Vertical deviation. Hold the Maddox rod in a vertical position in front of one eye.

If the muscular balance is normal a horizontal band of light will pass through the candle. If muscular imbalance exists, then the band of light will pass above or below the candle.

Record in the school register, blank column: Esophoria—Es. Exophoria—Ex. Vertical Deviation—V. D.

A combination of far-sightedness and exophoria or of near-sightedness and esophoria should receive immediate attention. The results are most serious. Several cases of this nature have come under the writer's observation within the past year, mostly in the grammar grades and in the high schools; cases where stuttering even has ceased upon the wearing of proper glasses and the exercising of the eye muscles.

Others, again, have stopped school, disregarded advice in this matter, and are yet spending all their nerve energy trying to see, and doing practically nothing else.

Color Blindness—No tests for color blindness are suggested at the present time. It may not be amiss to state those widely used.

1. The Holmgren Test. "The person is given a *test skein* of wool of *light-colored pink*, and told to select (not name) from a mass of similar skeins, those which most nearly resemble the skein to be matched. If he is color blind, he will confuse the grays, the greens, the pinks, the browns and the reds. As a confirmative test he is given a light, pure green to match in the same way."

2. The Railroad Test (Thompson Test). The apparatus used is a stick to which numerous bundles of yarn are attached, light green being used as a test skein. The yarns on the stick are numbered from 1 to 20, and are arranged in *alternate green* and *confusion* colors. The *odd numbers* are green; the *even*, confusion colors. The selection of 10 tints is required. If the person has a good color sense his record will exhibit none but odd numbers. If he is color blind, the mingling of even numbers shows this defect. A similar plan in schools is often followed, where teachers are interested, using colored paper slips.

Green-blindness and red-blindness are the common forms. There may be blindness to blue, yellow, red or green. To green-blind persons red and yellow are the same color, *both yellow*, of different degrees of brightness. Green also appears as a pale yellow with a gray or white band in its central part, while the violet end of the spectrum is seen as different shades of blue. The brightest part of the spectrum is the *yellow*. The red is a sort of darkened yellow. To the green-blind, red flowers and green leaves would both seem yellow.

To red-blind persons red and green are the same color, *both green*, of different degrees of brightness. Green is the brightest part of the spectrum. The violet end is seen blue, as in green-blind persons. A band of white or gray occurs in the far end of the green. To the red-blind, red and yellow flowers would both seem green.

HYGIENE.—Light. Type. Script. Board-Work.

Light—Proper and sufficient lighting of the school room is most important. The light should come from the left, or from the left and rear of the desk, and from a source above the children's heads. Coming from the right it produces shadows of the hands and arms; coming from the rear the pupil, himself, is in the road. Light from the front is the worst of all.

There should be at least one square foot of window space to each four or five feet of floor space. Where windows abound excessive light can be readily controlled.

Where the *sills* are *low*, window shades should be placed at the bottom as well as the top of the windows.

Type—

Size of the letters: Breadth is more important than height. Letters usually are one-third higher than broad. As a *standard* the short letters that occupy space, nearly square, are taken; for example, the letter n.

The smallest retinal image perceived at the most sensitive part of the retina, the macula, corresponds to a visual angle of five minutes ($5'$). For reading, print is held at the distance of distinct vision, 12 to 14 inches from the eyes. For the retinal image to be of the proper size for adults to read easily at this distance, the height of the letter n should be about $1\frac{1}{2}$ mm. The distance between the lines $2\frac{1}{2}$ mm. For children the types should be much larger and the leading also.

The following minimum heights of types for the different grades are the result of much recent careful experiment:

1st Year—Type, 2.6 mm. 1-10 of an inch. Leading, 4.5 mm. 1-5 to 1-6 inch.

2d and 3d Years—Type, 2 mm. 1-12 inch. Leading, 3.6 mm. 1-7 inch.

All grades above the Fourth—Type, 1.6 mm. 1-16 inch. Leading, 3 mm. $\frac{1}{8}$ inch.

The metric values given are correct. The English equivalents are approximate changes. One millimeter (mm.) equals approximately 1-25 inch.

Larger type and wider leading is much easier upon the eyes.

Board-Work.—Charts. Taking the distance of distinct vision as 12 inches, it is easy to compute the size that letters or script should be at any given distance. Simply multiply the height of type given for books by the distance to the board (feet). These results are as follows: Board at distance of 30 feet.

1st Year—Non-loop script letters, 84 mm. 3 1-3 inches. Leading, 135 mm. $5\frac{1}{2}$ inches.

2d and 3d Years—60 mm. $2\frac{1}{2}$ inches. Leading, 120. 4 4-5 inches.

4th Year—54 mm. 2 1-6 inches. Leading, 108 mm. 4 1-3 inches.

5th Year and all other Grades—48 mm. 2 inches. Leading, 90 mm. 3 2-3 inches.

The metric values are correct. The English measures are approximate changes. Larger script is desirable.

Legibility of Type and Script.—The letters of the alphabet are not all equally legible. In reading, the eye does not examine all part of each letter, but fixes its point of *clearest vision* along a *horizontal line* which cuts the *tops of the main parts* of the letters. The difference in the legibility of a sentence, the top or bottom half of which has been erased, is most marked. Reference is here made to an illustration given at the October Teachers' Meeting.

The line which the eye follows is dependent on the shape of each letter. By reason of the action of the eye in this regard, certain letters are confused with others; for example, h and b, l with i, g and a, a with s; e, e, and o are readily interchanged.

Children make mistakes by substituting one letter for another. It has been found by careful experiment that the most legible letters are: w, m, q, p, v, j and f; h, r, k, b, x, l, n and u are classed as fair; a, t, i, z, o, c, s and e are poor.

Letters are also more legible if the internal spaces are greater. The letters have a greater breadth. The strokes of the types should not be *thin* nor yet unduly *thick*. The areas of black and white ought to be as much in a mass as possible. An unduly thick stroke infringes on the open spaces of the letters.

The spacing between the letters should not be less than half the width of the letter itself.

The intervals between words should be sharply marked. A space of *not less than double the width* of the letters is a good working distance. A greater space may be advantageous for learners, but too great a space retards.

Reading is accomplished mainly by observing the differences in the shapes of the *upper parts* (main parts) of the letters. The best type marks those differences most clearly, separates the letters sharply from one another by the right spaces and marks well the intervals between the words. What is true for type is true for work at the board, save for the effect of irradiation.

Irradiation.—Irradiation exerts some influence upon the legibility of letters. Because of irradiation a bright object on a dark background is seen larger than it really is. The stronger stimulation of the retina due to a bright object seems to spread out on the image of the retina.

An example of this is "the old moon in the new moon's arms." The part of the moon seen by "earth shine" always seems to be part of a smaller sphere than the bright part of the moon.

Again, hold a pencil across the flame of a lamp or a gas jet. The lead pencil appears very much smaller where it crosses the flame. The rays of the light from the flame are more intense than those from the pencil and affect a greater area of the retina.

The Effect of Irradiation on Type.—Because of the irradiation the white paper produces a rounding effect upon black letters, especially the corners. Some changes in type have been suggested in this regard, making letters *sharper angled*, and other changes making letters more open in form, etc.

On the blackboard, if the board were always black, the reverse would be true and the white letters would stand out sharp and clear. Unfortunately the board is not always black, but usually a grayish tint and the helpfulness of irradiation largely done away with, and the opposite effect results. For a similar reason the use of slates is condemned. Experiments have proved that the legibility of letters of equal size written on slates and on white paper with black ink is as 3 to 4.

Length of Lines.—The length of lines ought to be such that the muscles of the eyes work right under right conditions in moving the eyes to and fro. The shorter the line the less fatigue it produces. Again, there is a change of accommodation as the eye passes from the middle to the end of the line.

The proper length is given for books at three inches. For copybooks at five and one-half inches.

The schools as a rule call for too much written work from pupils under ten or eleven years of age. As little reading and writing as possible should be given pupils under ten years. Up to nine or ten years of age the auditory memory is stronger than the visual memory. Children are ear-minded.

After about the tenth year the visual memory becomes the stronger and continues to develop more rapidly than the auditory throughout school life. Children are then more eye-minded than ear-minded.

Many other points suggest themselves in the hygiene of the eyes and the work of the school room as the child develops.

Excellent books which give the results of the latest and most careful experiments along this line, also the subject of School Hygiene as a whole, are the following: "Personal Hygiene," Pyle; "Physical Nature of the Child," Rowe; "School Hygiene," Hope & Brown; "School Hygiene," Shaw. These books are plain and direct in statement, not over-technical, and contain much that every teacher ought to apply continually in the school room.

Importance of the Work in School Hygiene; the physical balance of children; the eye as an illustration.—It is not intended in this leaflet to over-emphasize the importance of correcting eye defects. The normal person can overcome defects in any direction to a greater or less extent and cannot afford to burden himself with spectacles or any other appendage which it is more trouble to take care of them to get on without. Merely this: In the normally developed and developing child the nerve centers' controlling all organs of the body work in harmony. When one organ of the body is so far out of good working condition that this harmonious action of the nerve centers is interfered with, trouble (more or less of it) results all along the line. Working ability is injured; development is arrested to some extent.

The nerve centers controlling the eye are situated in the occipital lobes of the brain and are in the closest relation with those of speech, hearing, nutrition, circulation and others. The function of vision is vital to every act, emotion and thought. Vision is, therefore, most important in relation to complete development.

The physical balance of the child involves all other organs to a greater or less extent for each. When normal development is in action there should be present at different ages a certain degree of strength and endurance, certain vital capacity and motor ability.

The child's precision and accuracy, the development of his memory, all these are an index to his physical balance on the one hand and his development on the other.

This larger study of the child is of the highest interest and importance. In it all study of sense development and sense defects, and all other functions find their proper setting.

BY-LAWS.

(Proposed Constitution and By-Laws, continued from page 418, December JOURNAL.)

ARTICLE II.

MEETINGS.

SECTION 1. The annual meetings of this Society shall convene on the third Tuesday in April of each year.

SEC. 2. Special meetings of the House of Delegates may be called by the President upon the written request of at least twenty Delegates, provided that each Delegate is notified as to time, place and object of the proposed meeting.

SEC. 3. During the annual meeting of this Society, the general meeting shall convene each day at 9 A. M., and at such other times as it may, by resolution, determine, which times shall not conflict with the sessions of the House of Delegates. Section meetings may be provided for by the Committee of Arrangements. The House of Delegates shall meet each day at 8 P. M., or at such other time as will not conflict with the general meetings.

SEC. 4. The general meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

ARTICLE III.

HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall be the legislative and fiscal body of the Medical Society of the State of California, and shall consist of delegates representing each component society.

SEC. 2. The House of Delegates shall meet at 8 P. M. on the first day of the annual session. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

SEC. 3. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 25 members, and one for each major fraction thereof, except in the event of reapportionment, as provided in Article IV, Section 8; but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 4. Twenty-five delegates shall constitute a quorum.

SEC. 5. Delegates shall be elected for a term of two years, and those societies entitled to more than one representative are required to arrange such election so that one-half of their delegates, as near as may be, shall be elected each year.

SEC. 6. At the first annual meeting of this Society, after the adoption of this Constitution and By-Laws,

the delegates of component societies entitled to only one delegate, shall draw lots to determine which half of the delegates shall hold for one year. Thereafter all delegates shall hold for two years, or until their successors are chosen.

SEC. 7. The House of Delegates shall approve all memorials and resolutions of whatever character issued in the name of the Medical Society of the State of California before the same shall become effective.

SEC. 8. The sessions of the House of Delegates shall be open to all members of this Society, but, except upon invitation they shall have no right to participate in its proceedings.

SEC. 9. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 11. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

ARTICLE IV.

DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

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All grades above the Fourth—Type, 1.6 mm. 1-16 inch. Leading, 3 mm. $\frac{3}{4}$ inch.

The metric values given are correct. The English equivalents are approximate changes. One millimeter (mm.) equals approximately 1-25 inch.

Larger type and wider leading is much easier upon the eyes.

Board-Work.—Charts. Taking the distance of distinct vision as 12 inches, it is easy to compute the size that letters or script should be at any given distance. Simply multiply the height of type given for books by the distance to the board (feet). These results are as follows: Board at distance of 30 feet.

1st Year—Non-loop script letters, 84 mm. 3 1-3 inches. Leading, 135 mm. $5\frac{1}{2}$ inches.

2d and 3d Years—60 mm. $2\frac{1}{2}$ inches. Leading, 120. 4 4-5 inches.

4th Year—54 mm. 2-1 6 inches. Leading, 108 mm. 4 1-3 inches.

5th Year and all other Grades—48 mm. 2 inches. Leading, 90 mm. 3 2-3 inches.

The metric values are correct. The English measures are approximate changes. Larger script is desirable.

Legibility of Type and Script.—The letters of the alphabet are not all equally legible. In reading, the eye does not examine all part of each letter, but fixes its point of *clearest vision* along a horizontal line which cuts the *tops of the main parts* of the letters. The difference in the legibility of a sentence, the top or bottom half of which has been erased, is most marked. Reference is here made to an illustration given at the October Teachers' Meeting.

The line which the eye follows is dependent on the shape of each letter. By reason of the action of the eye in this regard, certain letters are confused with others; for example, h and b, l with i, g and a, a with x; c, e, and o are readily interchanged.

Children make mistakes by substituting one letter for another. It has been found by careful experiment that the most legible letters are: w, m, q, p, v, j and i; h, r, k, b, x, l, n and u are classed as fair; a, t, i, z, o, c, s and e are poor.

Letters are also more legible if the internal spaces are greater. The letters have a greater breadth. The strokes of the types should not be *thin* nor yet unduly *thick*. The areas of black and white ought to be as much in a mass as possible. An unduly thick stroke infringes on the open spaces of the letters.

The spacing between the letters should not be less than half the width of the letter itself.

The intervals between words should be sharply marked. A space of *not less than double the width* of the letters is a good working distance. A greater space may be advantageous for learners, but too great a space retards.

Reading is accomplished mainly by observing the differences in the shapes of the *upper parts* (main parts) of the letters. The best type marks those differences most clearly, separates the letters sharply from one another by the right spaces and marks well the intervals between the words. What is true for type is true for work at the board, save for the effect of irradiation.

Irradiation.—Irradiation exerts some influence upon the legibility of letters. Because of irradiation a bright object on a dark background is seen larger than it really is. The stronger stimulation of the retina due to a bright object seems to spread out on the image of the retina.

An example of this is "the old moon in the new moon's arms." The part of the moon seen by "earth shine" always seems to be part of a smaller sphere than the bright part of the moon.

Again, hold a pencil across the flame of a lamp or a gas jet. The lead pencil appears very much smaller where it crosses the flame. The rays of the light from the flame are more intense than those from the pencil and affect a greater area of the retina.

The Effect of Irradiation on Type.—Because of the irradiation the white paper produces a rounding effect upon black letters, especially the corners. Some changes in type have been suggested in this regard, making letters *sharper angled*, and other changes making letters more open in form, etc.

On the blackboard, if the board were always black, the reverse would be true and the white letters would stand out sharp and clear. Unfortunately the board is not always black, but usually a grayish tint and the helplessness of irradiation largely done away with, and the opposite effect results. For a similar reason the use of slates is condemned. Experiments have proved that the legibility of letters of equal size written on slates and on white paper with black ink is as 3 to 4.

Length of Lines.—The length of lines ought to be such that the muscles of the eyes work right under right conditions in moving the eyes to and fro. The shorter the line the less fatigue it produces. Again, there is a change of accommodation as the eye passes from the middle to the end of the line.

The proper length is given for books at three inches. For copybooks at five and one-half inches.

The schools as a rule call for too much written work from pupils under ten or eleven years of age. As little reading and writing as possible should be given pupils under ten years. Up to nine or ten years of age the auditory memory is stronger than the visual memory. Children are ear-minded.

After about the tenth year the visual memory becomes the stronger and continues to develop more rapidly than the auditory throughout school life. Children are then more eye-minded than ear-minded.

Many other points suggest themselves in the hygiene of the eyes and the work of the school room as the child develops.

Excellent books which give the results of the latest and most careful experiments along this line, also the subject of School Hygiene as a whole, are the following: "Personal Hygiene," Pyle; "Physical Nature of the Child," Rowe; "School Hygiene," Hope & Brown; "School Hygiene," Shaw. These books are plain and direct in statement, not over-technical, and contain much that every teacher ought to apply continually in the school room.

Importance of the Work in School Hygiene; the physical balance of children; the eye as an illustration.—It is not intended in this leaflet to over-emphasize the importance of correcting eye defects. The normal person can overcome defects in any direction to a greater or less extent and cannot afford to burden himself with spectacles or any other appendage which it is more trouble to take care of them to get on without. Merely this. In the normally developed and developing child the nerve centers controlling all organs of the body work in harmony. When one organ of the body is so far out of good working condition that this harmonious action of the nerve centers is interfered with, trouble (more or less of it) results all along the line. Working ability is injured; development is arrested to some extent.

The nerve centers controlling the eye are situated in the occipital lobes of the brain and are in the closest relation with those of speech, hearing, nutrition, circulation and others. The function of vision is vital to every act, emotion and thought. Vision is, therefore, most important in relation to complete development.

The physical balance of the child involves all other organs to a greater or less extent for each. When normal development is in action there should be present at different ages a certain degree of strength and endurance, certain vital capacity and motor ability.

The child's precision and accuracy, the development of his memory, all these are an index to his physical balance on the one hand and his development on the other.

This larger study of the child is of the highest interest and importance. In it all study of sense development and sense defects, and all other functions find their proper setting.

BY-LAWS.

(Proposed Constitution and By-Laws, continued from page 418, December JOURNAL.)

ARTICLE II.

MEETINGS.

SECTION 1. The annual meetings of this Society shall convene on the third Tuesday in April of each year.

SEC. 2. Special meetings of the House of Delegates may be called by the President upon the written request of at least twenty Delegates, provided that each Delegate is notified as to time, place and object of the proposed meeting.

SEC. 3. During the annual meeting of this Society, the general meeting shall convene each day at 9 A. M., and at such other times as it may, by resolution, determine, which times shall not conflict with the sessions of the House of Delegates. Section meetings may be provided for by the Committee of Arrangements. The House of Delegates shall meet each day at 8 P. M., or at such other time as will not conflict with the general meetings.

SEC. 4. The general meeting may recommend to the House of Delegates the appointment of committees or commissions for scientific investigation of special interest and importance to the profession and public.

ARTICLE III.

HOUSE OF DELEGATES.

SECTION 1. The House of Delegates shall be the legislative and fiscal body of the Medical Society of the State of California, and shall consist of delegates representing each component society.

SEC. 2. The House of Delegates shall meet at 8 P. M. on the first day of the annual session. It may adjourn from time to time as may be necessary to complete its business, provided, that its hours shall conflict as little as possible with the general meetings. The order of business shall be arranged as a separate section of the program.

SEC. 3. Each component county society shall be entitled to send to the House of Delegates each year one delegate for every 25 members, and one for each major fraction thereof, except in the event of reapportionment, as provided in Article IV, Section 8; but each component society which has made its annual report and paid its assessment as provided in this Constitution and By-Laws, shall be entitled to one delegate.

SEC. 4. Twenty-five delegates shall constitute a quorum.

SEC. 5. Delegates shall be elected for a term of two years, and those societies entitled to more than one representative are required to arrange such election so that one-half of their delegates, as near as may be, shall be elected each year.

SEC. 6. At the first annual meeting of this Society, after the adoption of this Constitution and By-Laws,

the delegates of component societies entitled to only one delegate, shall draw lots to determine which half of the delegates shall hold for one year. Thereafter all delegates shall hold for two years, or until their successors are chosen.

SEC. 7. The House of Delegates shall approve all memorials and resolutions of whatever character issued in the name of the Medical Society of the State of California before the same shall become effective.

SEC. 8. The sessions of the House of Delegates shall be open to all members of this Society, but, except upon invitation they shall have no right to participate in its proceedings.

SEC. 9. It shall make careful inquiry into the condition of the profession of each county in the State, and shall have authority to adopt such methods as may be deemed most efficient for building up and increasing the interest in such county societies as already exist, and for organizing the profession in counties where societies do not exist. It shall especially and systematically endeavor to promote friendly intercourse among physicians of the same locality, and shall continue these efforts until every physician in every county of the State who can be made reputable has been brought under medical society influence.

SEC. 10. It shall have authority to appoint committees for special purposes from among members of the Society who are not members of the House of Delegates. Such committees shall report to the House of Delegates, and may be present and participate in the debate on their reports.

SEC. 11. It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body.

ARTICLE IV.

DUTIES OF OFFICERS.

SECTION 1. The President shall preside at all meetings of the Society and of the House of Delegates; shall appoint all committees not otherwise provided for; he shall deliver an annual address at such time as may be arranged, and perform such other duties as custom and parliamentary usage may require.

SEC. 2. The Vice-Presidents shall assist the President in the discharge of his duties. In the event of the President's death, resignation or removal, the Council shall select one of the Vice-Presidents to succeed him.

SEC. 3. The Secretary shall attend the general meetings of the Society and the meetings of the House of Delegates and of the Council, and shall keep minutes of their respective proceedings in separate record books. He shall be *ex-officio* Secretary of the Council. He shall be custodian of all record books and papers belonging to the Society, except such as properly belong to the Treasurer and the Editor, and shall keep account of and promptly turn over to the Treasurer all funds of the Society which come into his hands. He shall provide for the registration of the members and delegates at the Annual sessions. He shall, with the co-operation of the secretaries of the component societies, keep a card-index register of all the legal practitioners of the State by counties, noting on each his status in relation to his county society. He shall aid the Councilors in the organization and improvement of the county societies and in the extension of the power and usefulness of this Society. He shall conduct the official correspondence, notifying members of meetings, officers of their election and committees of their appointment and duties. He shall employ such assistants as may be ordered by the House of Delegates or the Council, and shall make an annual report to the House of Delegates. He shall supply each component society with the nec-

essary blanks for making their annual reports; shall keep an account with the component societies, charging against each society its assessment, collect the same, and at once turn it over to the Treasurer. Acting with the Committee on Scientific Work, he shall prepare and issue all programs. The amount of his salary shall be fixed by the Council.

SEC. 4. The Treasurer shall have charge of all the funds of this Society and shall disburse the same under the authority of the House of Delegates, or the Council, upon warrants attested by the Secretary and countersigned by the President. He shall furnish to the Council a bond in the sum of Two Thousand Dollars (\$2,000.00) for the faithful performance of his duties. He shall make an annual report in writing of the finances of the Society to the House of Delegates. He shall receive such salary as may be fixed by the Council.

SEC. 5. The duties of the members of the Board of Medical Examiners elected by this Society shall be such as are prescribed by the laws of California governing said Board.

ARTICLE V.

COUNCIL.

SECTION 1. The Council shall meet on the day preceding the annual session, and daily during the session, and at such other times as necessity may require, subject to the call of the chairman, or on petition of three Councilors. It shall meet on the last day of the annual session of the Society to organize and outline work for the ensuing year. It shall elect a chairman and a clerk, who, in the absence of the Secretary of the Society shall keep a record of its proceedings. It shall, through its chairman, make an annual report to the House of Delegates. The chairman shall appoint a committee of two, who shall audit the accounts of the Editor at least once each month, and who shall have general supervision of the office of the Society and of its publications. This committee may reject or cancel any advertising matter that it deems undesirable or unethical.

SEC. 2. In sparsely settled sections it shall have authority to organize the physicians of two or more counties into societies, to be suitably designated so as to distinguish them from district societies, and these societies, when organized and chartered, shall be entitled to all rights and privileges provided for component societies until such counties shall be organized separately.

SEC. 3. The Council shall provide for the publication and distribution of a periodical to be known as the "California State Journal of Medicine," or some similar title to be determined by the Council and such other publications as may be necessary, and shall have authority to employ at such salary as it may deem proper, an editor, who shall be responsible to the Council, and who shall properly edit and conduct the official journal and such other publications as may be authorized by the House of Delegates or the Council, and such assistants as may be necessary. The Editor shall furnish to the Council a bond in the sum of two thousand dollars (\$2000) for the faithful performance of his duties. All money received by the Council or the Secretary must be paid to the Treasurer of the Society. As the Finance Committee it shall audit the accounts of the Treasurer, Secretary, Editor and other agents of this Society at least once each year and present a statement of the same in its annual report to the House of Delegates, which report shall also specify the character and cost of all the publications of the Society during the year, and the amount of all other property belonging to the Society under its control, with such suggestions as it may deem necessary. In the event of a vacancy in the

Council or in the office of the Secretary, or the Treasurer, the Council shall fill the vacancy until the next annual election.

SEC. 4. It shall, upon application, provide and issue charters to county societies organized to conform to the spirit of this Constitution and By-Laws.

SEC. 5. It shall divide the State into Councilor Districts, specifying what counties each district shall include, and, when the best interest of the Society and profession will be promoted thereby, organize district medical societies, and all members of component county societies, and no others, shall be members in such district societies.

SEC. 6. It shall have the power to invest the funds of this Society. Whenever the number of delegates as provided in Art. II., Sec. 3, exceeds eighty, it shall make a reapportionment that will bring the number of delegates within this limit, after carefully examining the membership list of component societies to determine therefrom the number of delegates to which each county medical society should be entitled, such reapportionment to take place at the annual meeting next succeeding that at which the reapportionment is approved by the House of Delegates. It shall fix the salaries of the Secretary, the Treasurer, and the Editor. It shall carefully investigate all charges of mal-practice alleged against a member in good standing, and, if it is found that such charges are groundless, it shall take such steps as may be considered best for the protection and defense of the accused. When deemed necessary, the Council is authorized to employ an attorney to advise or defend in all matters for or on behalf of this Society, or a member of the same. The Council shall meet at the call of the chairman for the transaction of any business that may be properly presented to it.

SEC. 7. It may transact any or all business coming before it by mail, all propositions, motions, questions, etc., being sent, together with a proper ballot, to each Councilor, and when such ballots have returned to the Secretary filled out, and with the signature of the Councilors attached, they shall be filed and recorded as the votes of the Councilors on the matter propounded.

SEC. 8. For the purpose of properly electing the first Councilors under this Constitution and By-Laws, and until the Councilor Districts shall be arranged by the Council, the following shall be the Councilor Districts:

1. San Diego, Riverside, Orange, San Bernardino.
2. Los Angeles, Ventura, Kern.
3. Santa Barbara, San Luis Obispo, Monterey.
4. Fresno, Kings, Tulare, Inyo, Merced, Mariposa, Mono, Madera.
5. Santa Clara, San Mateo, San Benito, Santa Cruz, Stanislaus, Tuolumne.
6. San Francisco.
7. Alameda, Contra Costa, San Joaquin, Calaveras.
8. Sacramento, Amador, Eldorado, Alpine, Placer, Nevada, Yuba, Sutter, Sierra, Yolo, Solano, Butte, Plumas, Lassen, Napa.
9. Marin, Sonoma, Lake, Mendocino, Glenn, Colusa, Tehama, Shasta, Modoc, Siskiyou, Del Norte, Humboldt, Trinity.

On the election of the Councilors under this Constitution and By-Laws, this Section (Sec. 10, Article IV.) shall cease to be a part of these By-Laws.

John Julius Guthrie, brother of Dr. J. A. Guthrie, of the Navy, died after a lingering illness at the family home in Portsmouth, Va., on December 2. Dr. Guthrie recently returned from service in the Philippines and attended his brother faithfully though hopelessly during the final days of his life.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum Argentum Crede Collargol Colloidal silver Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol benzoate	{ Betol Naphthalol Naphthosafol Salinaptol
Beta-naphthol Salicylate....	{ Antiseptin Asepsin
Bromacetanilid	{ Airol Airogen Airoform
Bismuth-iodo-subgallate	{ Abrastol Asaprol
Calcium beta-naphthol sulphonate	{ Dormiol Amylene-chloral Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.) Antidolorin
Dithymol Diiodid	{ Ethylol Kelene Mono-chlor-ethane
Ethyl chlorid	{ Aminoform Ammonio-formaldehyde Cystogen Formin Saliformin Urotropin Helmitol
"", anhydromethylen citrate..	{ *Benzanalgene *Analgen *Quinalgen
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin....	{ Dulcin Sucrol Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan
Paraphenetin carbamid	{ Phenazon (B. P.) Phenylon Pyrazin Pyrazol Parodyn Salazolon Sedatin

Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	{ Acetophenone Hypnone
Plant pepsin	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-cafate	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration	{ Iodothyrene Thyroidin
Trioxymethylen	{ Paraformaldehyde Paraform Triformol
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Alsol	
Australian oil Eucalyptus = Flucol	
Bismuth chrysophanat = Dermol	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphal	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1% solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Guaiacol carbonate = Duotal	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garanotose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloroacetic acid, 50% solution = Acetocaustic	

A Reading Notice. Last month the JOURNAL printed in this space an extract from an editorial printed in a recent number of the *New York Medical Journal*, and signed by Dr. Roberts Bartholow, in which Dr. Bartholow commented favorably on "A Valuable Hypnotic." In the editorial the statement was made that the chemical in question was not a controlled article, and owing to that fact we published the abstract. Since the issue of the December number, we have been advised that certain persons look upon the abstract as a "reading notice." If it is a reading notice, we certainly were not the ones to receive the compensation; nor does the JOURNAL carry the advertisement of the firm supposed to be benefited. If it is a "reading notice," then does the *New York Medical Journal* publish signed editorial reading notices, in its most conservative of pages. It is exceedingly difficult to determine what is the truth, when working in a field so well occupied with liars, both in the trade and out of it, so we are somewhat at a loss to determine the status of the article in question. We are inclined to believe that neither Dr. Bartholow, nor the editor of the *New York Medical Journal*, would lend themselves to such a write-up scheme. There must be a mistake somewhere.

A CASE OF MASTOIDITIS WITH MENTAL DISTURBANCE.*

By GEO. H. POWERS, M. D.

(O) N September 14, 1902, Mrs. X. Y. entered St. Luke's Hospital, San Francisco, with a vague account of a severe disease of the left ear, from which she was supposed to have recovered. She was very nearly unconscious and entirely irrational, lying on her back, with the head turned a little to the right, shrinking from a candle held near the eyes and from a speculum inserted in the ear, otherwise showing no sensation or intelligence. The pupils were dilated, reacting normally to light, and there was no strabismus and no change in the fundus of the eye. There was tendency to opisthotonos and the abdominal walls were rigid and somewhat contracted, these conditions continuing until full consciousness returned, nearly three weeks later. There was no mastoid swelling or tenderness whatever, but sensitiveness in the left auditory meatus, and the meatus walls were somewhat swollen, just enough to render impossible a satisfactory inspection of the membrana tympani, and there was no sign of purulent or other secretion in the visible part of the meatus.

Incision of the drum membrane, as free as could well be made in an invisible field, was followed by a trifling hemorrhage and later by a few drops of pus, and had the effect of rousing the patient to a very talkative mood. After the pain of the incision was over she expressed relief, but could not control her thoughts or memory nor her tongue, but chattered on wildly, willing to be interrupted for the asking of a question, but unable to answer intelligently and resuming her irrational talk immediately. For

two weeks the conditions remained much the same, alternating between comatose periods and lively irrational ones, during which she had to be tied to her bed and was kept there only with difficulty.

September 17, a lumbar puncture was made by Dr. Williams, interne, and pneumo-bacilli found. The same organisms were found in cultures made from the secretions of the ear. Patient was seen by Drs. Sherman, Evans, Kenyon, Donald Smith and several others during this time.

September 28, I decided to operate and freely opened up the antrum and mastoid cells down to the tip, finding no pus, but granular and polypoid detritus filling the cavities. As there was at this time no purulent secretion either in the ear or in the mastoid, I did not open communication with the middle ear. For a few days after operation the patient's condition was not improved, but rather worse, the tendency to opisthotonos and to stupor being greater, but before the end of the week improvement began in all directions and by the seventh day she was quite conscious and rational and went on to uninterrupted recovery, with perfect hearing in the affected ear. Highest temperature had been 101, highest pulse 110. Leukocytes 5200-7000.

My reasons for declining to operate when I first saw the patient were that, firstly, it was impossible at the time to find out any details of her previous illness beyond the bald statement that she had recovered from a disease of the ear; secondly, her symptoms seemed to me those rather of meningitis (hysteria was suggested), not certainly of aural origin; and, thirdly, I thought she was too near death to endure anesthetics and operation.

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

CALIFORNIA COUNTY MEDICAL SOCIETIES.

NAME	PRESIDENT	SECRETARY	MEETS
Alameda County Med. Association.....	O. D. Hamlin, Oakland.....	A. H. Pratt, Oakland.....	Second Tuesday
Contra Costa Medical Society.....	J. T. Brennenman, Martinez.....	J. S. Riley, Port Costa.....	First Monday, E. O. M.
Fresno County Medical Society.....	Geo. A. Hare, Fresno.....	Angus B. Cowan, Fresno.....	First Tuesday
Humboldt County Med. Society.....	R. Felt, Eureka.....	G. N. Drysdale, Eureka.....	Second Tuesday
Kern County Medical Society.....	.....	Wm. S. Fowler, Bakersfield.....	.....
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	Second Monday
Los Angeles County Med. Society.....	Rose Talbott Bullard, Los Angeles.....	C. G. Stivers, Los Angeles.....	First and third Friday
Marin County Medical Society.....	W. J. Wickman, San Rafael.....	W. F. Jones, San Rafael.....	First Saturday
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	C. A. Poage, Hopland.....	Quarterly
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	First Thursday
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Doris Brumwell, King City.....	First Saturday
Napa County Medical Society.....	Elmer E. Stone, Napa.....	J. L. Arbogast, St. Helena.....	Quarterly
Orange County Medical Assn.....	Wm. Freeman, Fullerton.....	H. S. Gordon, Santa Ana.....	Second Tuesday
Placer County Medical Society.....	Chas. H. Binlon, Lincoln.....	R. F. Rooney, Auburn.....	March '04
Riverside County Medical Society.....	Louise H. Clark, Riverside.....	W. W. Robble, Riverside.....	Third Tuesday
Sacramento Society for Med. Imp.....	Thos. Ross, Sacramento.....	J. W. James, Sacramento.....	Third Tuesday
San Bernardino Medical Assn.....	James P. Booth, Needles.....	J. H. Meyer, San Bernardino.....	Second Wednesday
San Diego County Medical Society.....	Fred Baker, San Diego.....	T. L. Magee, San Diego.....	First Friday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	Wm. F. Barbat, San Francisco.....	Second Tuesday
San Joaquin County Med. Society.....	F. R. Clark, Stockton.....	W. S. Snedigar, Stockton.....	Last Friday
San Luis Obispo County Med. Soc.....	J. S. Jackson, San Luis Obispo.....	E. A. Dial, San Luis Obispo.....	.....
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	W. B. Cunnane, Santa Barbara.....	.....
Santa Clara County Med. Society.....	W. T. McNary, San Jose.....	J. Lambert Asay, San Jose.....	Third Wednesday
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	Saxton T. Pope, Watsonville.....	Quarterly
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	R. F. Wallace, Redding.....	Quarterly
Sonoma County Medical Society.....	J. W. Jesse, Santa Rosa.....	G. W. Mallory, Santa Rosa.....	Second Thursday
Tri-County Medical Society.....	.....	S. T. Pope, Watsonville.....	.....
Ventura County Medical Society.....	J. H. Love, Ventura.....	A. A. Maulhardt, Oxnard.....	First Monday
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	F. R. Fairchilds, Woodland.....	.....
Yuba and Sutter Cos. Medical Soc.....	J. H. Barr, Marysville.....	G. W. Stratton, Marysville.....	Quarterly

Secretaries of County Societies are requested to notify the JOURNAL of any changes in above directory.

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FEBRUARY, 1904.

EDITORIAL NOTES.

A principle of right vs. money; that is exactly the question which the Publication Committee and the Board of Trustees have had to face. We started your JOURNAL with the plainly expressed policy to adhere to the letter of the ethical law in the advertising published in the JOURNAL. The "Principles of Medical Ethics" adopted by the American Medical Association and by this Society, Chapter I, Article 1, Section 8 (page 191 of the Register), says: "**It is equally derogatory to professional character for physicians . . . to dispense or promote the use of secret medicines.**" That reads pretty clear and it does not seem possible that anyone could misunderstand it. A medicine is defined as a drug or a therapeutic application; broadly, anything used in the treatment of disease. Secret, is unknown. A secret medicine, then, is one *the composition of which is unknown*, and the ethical principles which our Society and Association have promulgated distinctly state that such secret medicines cannot be used or employed by physicians without violating the right. The question which every physician should be able to answer, if asked to do so, is not, "What is the name of the thing you are giving your patient?" but "What are you giving your patient, and in what amount?" Do you not see the difference? There are hosts of things made for and used by the profession, unfortunately, the ingredients of which the physician does not know. If asked, he could only answer, "Brown's Petaluma Tonic," or "Black's Antiedema Paste," or "Anti-this-or-that." He would not be able to state what he was really giving his patient. Suppose the manufacturer says the mixture contains iron, arsenic

and strychnin. Does that give you any information? Comparatively speaking, no. For you do not know how much iron, arsenic or strychnin the patient takes to a dose. You would still be using a secret medicine.

Note the language of the principle of ethics quoted: "To dispense or *promote the use of secret medicines.*" That is the phrase

ETHICS AND ADVERTISING.

which brings the matter home to the Publication Committee, to the Trustees and to the House of Delegates. If we allow advertisers to present to the attention of our members and readers statements relative to "secret medicines," are we not guilty of a violation of this ethical principle? Are we not aiding in "*promoting the use of*" these things? It is of no avail to reply that somebody else, or some other journal does these things. It would be as sensible to defend the practice of murder or of rape by alleging that other people do them. Nor can it properly be urged that we need money to make a business success; one might as well support the practice of bank robbery or the profession of highwaymanship. It is a plain and simple question of right and wrong and admits of no compromise; certain things are either right, or they are wrong—which shall we choose? If the principle stated be true, and it is wrong to "*promote the use of secret medicines,*" then such medicines cannot be recommended without stultifying ourselves, and to publish advertising matter relating to them is practically and tacitly recommending them. That was the position which the editor took when he started the JOURNAL; that position was endorsed by the Publication Committee when it took active supervision of the JOURNAL; it is the position which has again been emphasized by the Publication Committee, and unanimously endorsed by the Board of Trustees. Several perplexing questions came to the editor's attention, and they were put on file waiting for the decision of the committee and the Trustees. The committee has met and has decided; the Trustees have met and have passed a resolution sustaining the committee and recommending it to continue the original policy of publishing only such advertising statements as literally conform, within a reasonable interpretation, with the letter of the principle involved.

Why is all this such an important question that it involved a meeting of the committee and of the Trustees, and has taken up so much space? Let us see for a moment what it means. In coming to the decision to stick to the right thing, we have wiped out, by writing one of the shortest words in the English language—yet a word that

RIGHT OR DOLLARS?

has been said to be the hardest word to say—NO, something like \$800 worth of contracts that were on the desk waiting to be OKed, and cut off a thousand dollars of almost certain prospective income. That is about what it cost us to say that little NO, and to adhere to a principle *which our Society and our Association have declared is a right principle*. The issue is plain and clear and cannot be avoided. We may just as well make the decision now as to put it off; the Publication Committee certainly will not bury its head in the sand and refuse to see what confronts it. Right is right and wrong is wrong, and a few dirty dollars do not make a wrong come any nearer being a right—though they are commonly accepted as a good excuse. What position will you, as a member of a society that has formulated and promulgated this document, embodying those principles which are declared to be right, just, decent and ethical, take in this matter? Don't shirk the issue; don't try to put it on someone else; you must face it sooner or later, so we put it to you now. Will you stand for the right and a possible deficit which you will have to provide means for meeting—for it costs money to publish the sort of JOURNAL you are getting—or will you choose to take the dollars and ignore the principle you have subscribed to—to be bought outright—to be subsidized—to depart from that which you have, in theory, declared to be right?

Some advertisements, almost universally regarded as "good business," came into the office and, pending a final decision of the question, were accepted and published. They were not approved by the Publication Committee, for there was no opportunity of getting a definite decision on so momentous a question without careful study. But that is in the past. Now what can we do in the future? Must this action deprive the JOURNAL of the possibility of eventually getting upon a self-supporting basis? Some of us have given a good deal of careful thought to the matter, and we believe that such is not the case. We have enough faith in those manufacturers who are doing a perfectly straight business to believe that they will come to see this as we see it, and to realize the advantage to themselves of being in such good clean company. It remains for time and hard work to demonstrate whether this conclusion is justified. Certainly it will take longer to reach the goal, but we firmly believe it will be reached, and that you will find in the end that honesty of purpose in this matter will pay, as truly as every good business man has found that honesty in business pays.

What, exactly, is a "secret medicine"? That is the crux of the whole matter. There are, or

A SECRET MEDICINE.

may be, several definitions of the term. The actual definition has been formulated by a national pharmaceutical organization of a foreign country, and has been accepted and adopted by the American Pharmaceutical Association, and by it recommended to the A. M. A. According to this definition, a medicine is secret if everything about it—ingredients, working formula, method of preparation and all processes—are not known and published. In theory this is entirely correct. But practical conditions are such as to make it impossible to enforce such a definition. Large amounts of capital have been invested in honest pharmaceutical manufacturing business, and this capital should be protected from dishonest competition. Consequently, until there may be devised some way for securing protection not only to this capital, but also the public and to the patient, it would not be right to insist upon the disclosure of these working methods. We can, however, insist that the manufacturer give a truthful statement of the actual amount of the active ingredients in the finished product of that which he wishes to advertise. This is the working definition which we have placed upon the term "secret medicine." If at any time an advertisement appears in the JOURNAL in which the advertiser publishes a formula that can be shown to be untruthful, such advertisement will be dropped upon the demonstration of that fact. In this whole contention we do not intend to criticize other journals. They may not appreciate the facts of the case, or they may be under the control of men who do not care for anything but money. It is not our place to judge. But we have decided to do the right as we see it, and we hope you will all approve.

Some replies from advertisers have been received since the Publication Committee took the action which we have just discussed.

UTTER RUIN?

One firm writes: "In sending you copy for advertisement . . . we wish to compliment you, and will say we cheerfully go into the JOURNAL to encourage the worthy work undertaken." "It is to be regretted that so few medical journals are on such a plane." Another, in sending in the formula to accompany the advertisement, writes: "In this connection we beg to state that if the rule made by the Society in regard to advertising be strictly carried out, the same will make the advertising space taken by our company of decidedly more value to us." So you see, perhaps the action of the Committee, in supporting the editor's policy, may not lead to utter ruin, after all! It may, in the end, pay to be decent as well as it pays to be honest.

In the sworn affidavit accompanying a candidate's application it is expressly stated that "at the time of granting the diploma the requirements of the medical school were in no particular less than those prescribed by the Association of American Medical Colleges for that year; and that the applicant complied with all the requirements of said school." It now appears from evidence obtained by the Board of Examiners that two local medical schools recently granted diplomas to matriculants after two years' attendance. In this year's announcement of one of these schools (a regular college) may be found the name of an illegal practitioner who, after one single course, was graduated with full honor. Hence the absolute necessity, on the part of the Board of Examiners, to exact other credentials than a diploma. For this purpose a committee has been appointed to investigate and report on the credentials of all applicants for license. It may be safely predicted that the strict enforcement of that portion of the Medical Act relating to the standard of medical colleges will cause the rejection of several apparently satisfactory credentials and delay the issuance of license to those who through false statements have succeeded in taking the examinations.

It has often been said that the modern surgeon has no nerves, but has a great deal of nerve; this may be largely true. At any rate, **INTERNIST; A NEW ONE.** there is a good deal of collateral evidence to substantiate a claim to nerve, and not the least of this evidence is to be found in the treatment of English. "Surgical English" is a painfully maimed and deformed freak, carved into grotesque abominations by the nervy (or nerveless) surgeon, and further distorted into ungainly shape by the brazen addition of illegitimate Germanic forms. The passion to mutilate is contagious, too, and the physician—the family doctor—has shown the primary lesions. Surgeons were not content with the simple mutilation of such portions of the King's English as came within their technical domain; they were not content to "operate a case" or to note that a "case died," or got well, and such like absurdities; they must needs impart their painful craving to the physician. At first they were content to observe the growing use, by physicians, of their bastardized German expression "saw a case," the "temperature of the case," etc. But now they have handed one to the physician that is a little—just a little—too much for patience to endure. They have branded him an "internist"—whatever that anomaly may be—and he does not seem to object! A surgeon is "one who practices surgery," and a physician is "one who practices medicine."

Then what in the world, the flesh or the devil, is an "internist"? A physician, who had thus been publicly branded, was asked what it meant; he replied that "it is German." That may appear to some to look like a definition; but is it? Please, please, *what* is an internist?

SAN FRANCISCO BOARD OF HEALTH.

The interest of the people of San Francisco has been stirred by the action of the present Mayor, E. E. Schmitz, in his appointments of new members of the Board of Health to take the places of Drs. V. P. Buckley and R. W. Baum, whose terms of office have expired, and Dr. W. B. Lewitt, who has resigned from office. In the places of the two former gentlemen, Mayor Schmitz appointed Dr. W. A. Harvey and Dr. J. A. Hughes, and in the place of Dr. Lewitt he appointed Dr. J. F. Poheim. These new appointees, with Dr. James W. Ward and Dr. John C. Stinson, Mayor Schmitz's appointees of last year, are the medical members of the present Board of Health.

Dr. James W. Ward is a graduate of the Homeopathic Medical College of New York, 1883. He has been in San Francisco since 1886 in the active practice of homeopathy. Dr. John C. Stinson is a graduate of Trinity Medical College, Toronto, Canada, 1893. He has been practicing medicine in San Francisco since that date. Dr. W. A. Harvey graduated from the College of Physicians and Surgeons, St. Louis, in 1895, and was licensed to practice in California in 1901. Dr. J. A. Hughes took his degree from the University of California, Medical Department, in 1883, and received his certificate in the same year. Dr. Joseph A. Poheim graduated at Cooper Medical College about seven years ago; he has spent most of this time abroad, having returned to San Francisco but recently.

These facts are cited because they give some inkling to the general body of the profession, who may not know any of these men personally, of what will be the value of the new appointees as sanitarians and as practitioners of civic hygiene. The interest of the medical man here is identical with that of the non-medical man. He wants to be sure that the men in authority, and who only can do certain acts legally, are wholly qualified in training to manage epidemics, discover and abate possible sources of infection, and conduct in a clean and efficient way the extensive system of the city charities.

It has to be said that not one of these gentlemen has given any outward sign that he is particularly interested in sanitary science or in hospital construction and management, nor that he has any other object in life than the practice of his profession to earn a living. If there has been any word, written or spoken, by any one of these

men on the subjects which must now occupy their time and thoughts, the JOURNAL is ignorant of it; and yet every man, woman and child in San Francisco wants to be assured that these men are experts and will make efficient officers.

The first meeting of the newly constituted board was not one that could give that assurance, and was one that could only give rise to a decided feeling of unrest. Acting acknowledgedly in accordance with instructions, the new board at once declared vacant office after office in the Health Department, and not only offices that had been filled by simple appointment by previous boards, but also those that were held under the Civil Service law, evading the law by giving to new appointees new designations but without changes of duties.

Promptly following this act there was appointed a joint committee of investigation by the Board of Supervisors, consisting of the committees on Finance, on Civil Service, and that on Hospitals and Health, to inquire into the acts of the Board of Health as to their legality. This investigation is, at the time of this writing, being conducted. So far it has not developed anything to the credit of the new Board of Health. Rather, it shows that they are anxious to get place and to make places. Individually, some have confessed to ignorance of the very rules they have, in taking office, sworn to obey. The president, who is not a new appointee, acknowledged not having attended a meeting of the board during the last eight months. Others have yielded the information that they did not know the men whom they discharged for incompetency, nor what were the duties in which they were incompetent; neither did they know the qualifications of their own appointees, nor if they were fit persons; and sometimes they had never seen the persons they appointed and had only known their names for a few hours. One has given the impression of utter frivolity in the face of a public duty; and collectively they have acted as if they were responsible only to the man who appointed them, and that him only would they serve.

This is a matter which interests the medical profession, for these men are representing that profession in the city government; it is a matter that interests the people, for the Board of Health is practically the physician of the city; it is a matter that particularly interests the trades unions, for not a few of their members have to go to the public hospitals in times of accidents or of sickness; finally, it is a matter that is of paramount interest to the men themselves, for they may think that the daily press is alone in criticizing them, and may be ignorant of what is thought and said by men in the clubs, on the street and in the cars—wherever men interested in public affairs meet and talk.

ECONOMY AND EFFICIENCY.

The revolution in the San Francisco Health Department is excused or explained by the Mayor and his appointees on the ground that it is done in the interests of economy and efficiency.

The economy is shown in the reduction of expenses by the discharge of men. Under the former board the salaries of appointees from the eligible list of the Civil Service Commission was \$46,380 per annum; under the present board it is \$20,280. Under the former board the salaries of appointees not on the civil service list was \$18,420; under the present board it is \$35,520.

In effect, \$26,100 has been taken from civil service appointees, and \$17,100 has been given to places that are purely patronage positions, and while it may be thought that this *looks* like economy, because \$9,000 seems to be left unappropriated in the treasury, it is plain to anyone that \$17,100 spent on men whose qualifications the appointing officers do not know will in the end cost the city far more than the \$46,380 salary roll of the old board. The economy that is promised is, on its face, false economy, and that the new appointees, of unknown qualifications, can be more efficient than the old, who had had to pass an examination for their appointment, is a silly thought. Nor does anyone for a moment expect that the \$9,000 not now appropriated will remain long in idleness.

There are certain points where it seems to be plain that the department will be crippled. Under the last two boards the vital statistics of the city have been carefully made out and have been published. Not only were they well done, technically, but they made a creditable showing for San Francisco, and this was of value to the city commercially. There is reason to fear the abandonment of the health reports of the city, and the confusion of the statistics in the office because of insufficient and incompetent service, for the clerk who now is to perform this duty has many other duties put upon his shoulders. At another point there is likely to be crippling of the department, for there is not left at the City and County Hospital a single office which can be filled from the civil service eligible list. The whole of the officering of that part of the Health Department will be in the hands of the politicians, and the public and the patient will have to pay for it. Little enough money now is allowed the patients in the hospital; how will they fare when they have to divide that with the politicians? Finally, in order to make the forced showing of economy, the inspection force for plumbing, markets and dairies has been lessened, and consequently the work that can be done in this way is cut. Altogether the new board, hampered with a political master and political methods, has a most unenviable task before it, and if it is to accomplish anything, it must

work in a very different manner from that which it has shown in the present investigation.

EMBEZZLED FUNDS.

In the showing of the disgraceful condition of affairs that has been allowed to exist in the finances of the University of California, made in the report of the expert accountants who went over the books of Mr. W. A. McKowen, the late Secretary, appears an item of considerable interest to the medical profession.

About two or three years ago, the Regents of the University took over the control of the Medical Department, and to a considerable extent conducted its finances; at the same time the standards of the Medical Department were very materially raised, and in consequence the number

of students decidedly lessened. Since then, the Medical Department has had more or less of a struggle to maintain itself on a proper basis.

McKowen succeeded in embezzling nearly \$27,000 in the period between January, 1902, and October, 1903, and for a time it was feared that the Medical Department would be called upon to stand the loss of the funds paid over to the Regents. This loss, however, will not fall, it is believed, on the Medical Department, for the Regents still honor the drafts of the department and have given no notice of intention to do otherwise. If the department had lost the money, it would have been compelled to close its doors. While it is deplorable that the University should be called upon to lose this large sum, it is much better able to bear it than the department would have been, although the University itself is in need of more money.

PROFESSIONAL ETHICS.

In a personal communication recently received by the editor from one of the foremost chemists and pharmacists in the country—a man who may write after his name many degrees, including that of M. D.—occurs the following: "In the good old days the medical profession stood as a unit in condemnation of all secrecy and monopoly in medicine. Today the professional spirit has waned to such a degree that the physician who sees advertised in his medical journal—very likely the official organ of the American Medical Association—such things as ———, ———, or ———, does not stop to ask what place these things have in a scientific *Materia Medica*, but gives the new remedy a trial. It may be that the formula is published; it may be that there is a vague and prevaricating statement of the composition of the remedy; or it may be that a sphynx-like silence is maintained in regard to a matter that so little (?) concerns the physician. So it has come to pass that, largely, the American physician today is prescribing and is content to prescribe secret nostrums in place of remedies of known therapeutic properties. They seem to be quite blind to the obvious fact that many of these remedies are intended for self-prescription—that the literature which accompanies them is addressed really to the patent medicine purchasing public, and not—as pretended—to the "Medical Profession." Thus the principle of secrecy in medicine has been allowed to establish itself in strongholds that were supposed to be occupied by allies of the medical profession. This is the giant evil of Medicine today. The medical journals are all subsidized—willing to share the profits of a business that is opposed to the fundamental principles of professional ethics.

This is only too true—too bitterly true. So far have we departed from all ethical or even decent principles that few of us can without a feeling of deep moral turpitude—of shame—read Article I, Section 8 of the "Principles of Medical Ethics": "It is equally derogatory to professional character for physicians to dispense or promote the use of secret medicines . . . It is highly reprehensible for physicians to give certificates attesting the efficacy of secret medicines, or other substitutes used therapeutically. Probably less than ten per cent. of those who have endorsed the statement of proper ethics just quoted would be unconvicted in the event of its application to them-

selves. And how true is the claim of the writer quoted that men are deliberately led into thus doing wrong by their subsidized medical journals? Of all the advertisements in all the medical journals published in the country, hardly five per cent would not be ruled out by the action of this "Principle of Ethics"! Yet, if it were absolutely lived up to, there is but one pharmaceutical house in the United States that could advertise all of its products. The professional interests of medicine and pharmacy cannot continue for ever in the present ruinous course; eventually they will be forced to fix standards for the unofficial preparations and to see that these standards are maintained. That will necessitate some provision for the protection of the manufacturers who will thus be forced to divulge their formulas in order to conform to professional requirements.

TWO VIEWS OF ADVERTISING.

The regular school of medicine prides itself on its science, its numbers, its organization, its general high standing; and, in the main, this pride is justified. Yet there are certain things which might be altered without having anything save a beneficial effect. Note the views on advertising expressed in two journals, the one an eclectic, the other a "regular": The *Chicago Medical Times* (eclectic) says: "The willingness, on the part of the profession, as a whole, to prescribe the many heterogeneous compounds on the market, has two serious results: first, it encourages the manufacturer in flooding the market with compounds; and, secondly, it prevents the study of the single remedy." The *St. Louis Med. and Surg. Journal* for January prints an editorial to which is set the classic heading, "Let the Galled Jade Wince." The editor of this journal—"regular"—presumably edited by a regular and subscribed to by regulars, most of whom have approved and endorsed the Principles of Ethics of the A. M. A., attacks Dr. Register and those who agree with him for the following expression of editorial opinion: "As a member of the A. M. A., I don't believe that it would be amiss or improper in any sense, or an injustice to anyone, to say that the *Journal of the American Medical Association* should not be the greatest advertising medium for proprietary medicines in this country." In support of this edi-

torial opinion, Dr. Register had at least one unanswerable argument—the extract from the Principles of Medical Ethics, of the American Medical Association (which see printed at the bottom of our advertising pages). Apparently this portion of the "Principles" is placed in the class "facetiae," by many prominent members of the association who are connected with medical journalism. The editor in question not only disagrees with Dr. Register, but seems to think the criticism is due to jealousy, and that such journals as object to seeing the association journal the biggest agent to "promote the use of secret medicines" in the United States, are actuated wholly by their own desire to secure more of this self-same advertising. He further says, in commending the publication of advertisements of proprietary medicines: "We have a number and we hope to get more." We certainly wish him every success in his worthy (?) desire.

THE "ANTITOXIN TRUST."

About the middle of January the papers (news papers, so called) printed a number of dispatches from Chicago to the effect that the manufacturers of antitoxins had formed a trust to raise the price of diphtheritic antitoxin. The statements thus forwarded over the "longest in the world," and otherwise, were distressing. "Price of death" demanded by the "trust," etc., etc. One almost began to be nervous lest he should get diphtheria and, not being either a millionaire or a trust, be forced to die the death. The city, too poor to buy antitoxin for its destitute, at the enormously enhanced prices asked by the "trust," would soon become an infected spot, and then—horrors! Scarcely had the nervousness naturally due to such a terrible condition reached its climax, when reassuring word came—not by the "longest in the world," but by the less speedy if more reliable route of U. S. mail, advising us to the contrary. Within a week from the date of birth of the dreadful rumor of impending doom, one half of the manufacturers of antitoxin in the United States wrote to the JOURNAL denying the whole story as a baseless fabrication, not even worth transmission over the "longest in the world." The JOURNAL is relieved and its hysterical sore throat has departed without the use of the new 1000-unit immunizing dose. Singularly, all of the communications anent this subject agree in statement and in detail, so that they may presumably be accepted without question. It would appear from these statements that the explanation is rather simple. Apparently, the various manufacturers of antitoxin have come to the conclusion that they have been putting out too many sorts of packages and varieties of doses, and that this multiplicity of material was a needless extravagance. In consequence, they seem to have come together and reached a general understanding in the matter. The weaker strength of serum is no longer made, and the packages of 500 and 1500 units are no longer put up. Believing that 500 units is too small a dose to be properly immunizing, and that if 1500 units is a good dose, 2000 units is a better one, they have done away with these. Serum may now be secured in but one strength (what was formerly known as "regular," "X," etc., no longer being on the market), and at a uniform price; of course the product of each individual manufacturer is still far superior to the product of any other manufacturer—above all things we must be fair and treat all alike, or there will be envy, hatred and malice afloat in the land. The prices quoted on packages of 1000, 2000, 3000 and 4000 units are respectively, \$2.00, \$3.50, \$5.00 and \$6.50, being a reduction from previous prices for the same strength serum and size package of 25, 50, 75 cents and \$1.00. "Of course there are liberal dis-

counts to druggists from these prices," but we are not informed as to the discounts. If, in this day and generation, a mere physician may dare to comment upon the producer and marketer of that which he uses, the action would seem to be rather good than bad. Too many kinds of packages and too many sizes of units only serve to render confusion worse confounded, in the tottering, wavering mind of physicians, and hence anything that releases the over-taxed brain from some of its burden of remembrance is to be welcomed. And, too, there has really been a reduction, if the figures quoted are correct, and of this there seems no good reason to doubt. We almost forgot to say that, in each case, this reduced price includes the very best possible style of aseptic serum syringe and needle.

PUBLICATIONS.

Modern Methods in the Surgery of Paralysis. By Jones and Tubby, of Liverpool and London. We are glad to note the appearance of this little new work which treats in a most exhaustive manner of the later developments in the art of Muscle Grafting, Tendon Transplantation, Arthrodesis, and the numerous operative procedures that recent experiments place at the service of the orthopedic surgeon for the relief of the paralytic deformed. From the vast experience of Mr. Jones, particularly, the book is enriched with numerous case histories and detail records of surgical procedures adopted and the final results. These records are so simple, the work so well planned, and the result so evident, that they add much to the knowledge of the subject and will be of great value to the surgeon, and particularly so to the orthopedist. The book is particularly good in dealing with the deformities due to spastic paraplegia; radical operative methods, followed by persistent training, and supplemented with light braces, are enthusiastically advocated, and many examples are related of comparative cures occurring in the practice of the authors in a disease which has ever been the despair of the surgeon. Many statements are made in an axiomatic manner which at first appear startling: "By a proper appreciation of the available therapeutic and mechanical agencies we need rarely, if ever, encounter any paralytic deformity"; and "If an overstretched and partially paralyzed muscle is placed in a state of rest, it rapidly recovers." Such remarks as the above occur rather frequently, and are not loose statements of unripe opinion, but are calmly made and supported by good logic and numerous demonstrations. The work throughout proves that the writers are thoroughly conversant with all that has been done in this field, and what is very remarkable for European authors, they are fully posted in the advances made in orthopedics by American surgeons. From end to end the work of Jones and Tubby is well worth the study of those interested in the modern treatment of paralytic deformities. It is published by Macmillan & Co.
S. J. H.

Origin of Quaternary Man in the Western Hemisphere. By A. S. Ashmead, M. D., New York. Reprinted from the *St. Louis Med. and Surg. Journal*. Dr. Ashmead presents an excellent discussion of the question which he presents: "Whether the American Indians . . . are not descendants of paleolithic man of Western Europe, who emigrated during glacial times from the Ligurian peninsula by a then existing land route, now almost completely submerged by the Atlantic Ocean, which included in its continuity the Azores, Canaries, and West Indian Islands, and connected the two hemispheres?"

TRAUMATIC NEUROSES.*

By H. G. BRAINERD, M. D., Los Angeles.

EVER since Erickson promulgated his theory that spinal concussion was the cause of the nervous phenomena frequently observed after traumatism, such as blows on the head or spine and such injuries as are received in runaway accidents and railway collisions, when by reason of the velocity the concussion is great, there has been a great diversity of opinion among the medical profession in regard to the etiology of these symptoms. It has been shown that these symptoms were in many cases not of spinal, but of cerebral origin, and that they were very unlike the symptoms ordinarily observed in cerebral concussion, and further that they were not unlike the symptoms observed in neurasthenia and hysteria arising in patients not suffering from traumatism.

The different views of the condition give rise to the following terms: Traumatic neurasthenia, Traumatic hysteria, Traumatic neuroses, Traumatic psychoses, "Railway Spine," Erickson's disease.

In a symposium on this subject, at a recent meeting of the American Medical Association, we find the opinion of the railway surgeons quite diametrically opposed to the opinion of the neurologists, as is shown by the following quotation from Dr. Bevan's paper:

My report is an indictment of the course usually pursued by the medical attendant in handling these cases. The one point which I especially desire to make clear is this: **The medical attendant, in the majority of cases, is more than any other factor responsible for the development and continuance of the condition known as traumatic neurosis.**

The condition, traumatic neurosis, is a mental state, not a disease with organic lesion. The mental state due directly to the injury and mental shock is transient, and under proper conditions and advice is soon recovered from, in the vast majority of cases. When the condition persists, the continuance is due to suggestions furnished by medical attendants, legal advisers, interested and sympathetic friends and relatives or auto-suggestions, with either money or sympathy in view.

Not long since the chief surgeon of an important railway company said to me: "We no longer have cases in our courts of 'Railway Spine,' for we have been able to show successfully by the employment of detectives that these patients are either malingering or that they grossly exaggerate the seriousness of their symptoms."

We are no doubt influenced in our opinion as to the causation and types of certain forms of disease very largely by our personal experience, especially if that may have been somewhat extensive, and no doubt the reason why the opinion as expressed by Dr. Bevan prevails largely among railway surgeons is because they so often meet cases of malingering and of exaggeration of symptoms in people who are claiming compensation for injuries.

The fact that people who are suffering from traumatic neuroses oftentimes make rapid recoveries after the settlement of their litigation, does not disprove the genuineness of their illness. Pending litigation is most disastrous to the recovery of cases of neurasthenia or hysteria where the cause of the trouble was not traumatism and where the litigation was not for compensation for injury and it is not strange that, once the burden of litigation is taken from their shoulders, those people suffering from traumatic neuroses make a prompt recovery, even where the litigation has not resulted favorably to them.

It is certain that traumatism, without causing any external, visible signs, may produce epilepsy and insanity and each of these two conditions may also be produced by profound mental shock.

It is commonly accepted by the profession that neurasthenia and hysteria may be caused by great mental shock or strain, by sexual excesses, by the use of alcohol or other toxic substances, by la grippe and other diseases; in short, by anything which seriously impairs the nutrition and consequently the function of the neurons. It seems to me not irrational to believe that concussive violence to the head or spine may impair the nutrition and later the function of the cerebral and spinal neurons without actual destruction of them.

I have until recently felt very sure that fright, or mental shock was largely responsible for a neurosis which arises after a serious accident, and that it might be the sole cause without any visible physical injury. That it is not essential to the development of traumatic neurosis, I think will be shown by the following cases:

Case I.

Miss C. S., age 26, with previous good health and good family history, whose energy and ambition had succeeded in securing for herself an important position in a large abstract office, took her vacation in July, 1901, in the northern part of this State. One day while swinging in a hammock, the rope or fastening at the foot-end of the hammock broke and she fell about two feet to the porch floor, striking on her back at about the waist line. She was considerably shaken up by the jar, but did not consider herself seriously injured. This occurred on the evening of the 11th of July, and though she had some soreness of the back on the morning of the 13th, she went to San Francisco and staid until the evening of the 16th in that city, doing a great deal of running about, shopping, visiting, etc. It was not until the 15th, four days after the injury, that she had sufficient pain to discover that her back had been seriously hurt at the time of her fall. She returned to Los Angeles on the 17th and the following day consulted her physician, a well-known railway surgeon, who certainly did nothing by his advice to alarm her or bring on such serious symptoms as followed. She resumed her work in the office on the 18th and continued to do her work for a week, when she felt so prostrated, confused, and had so much pain in her back, which was increased by being on her feet, that she was obliged to give it up, as she then supposed, for a few days' rest. After remaining at home and keeping quiet for five days, instead of being better, she was suffering so much pain in the head and back and

*Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

there was such extreme prostration, that she was forced to take to her bed and remain there for six weeks. During this time there was continuous and severe pain in the head and back, confusion of thought, slow mental reaction, tremor of tongue, lips and hands, slight exaggeration of knee jerks (but no ankle clonus, no disturbance of sphincters), anesthetic patches on back and limbs, dermatitis factitia, clammy hands and feet, extreme sensitiveness to pressure over the spine throughout nearly its entire length. Her voice had a weak, plaintive, far-away sound, often heard in malingerers. At times there was a mild delirium in which she failed to recognize her friends or her surroundings, though in her own room in her own home. She could usually be aroused from this condition by special effort. Her appetite was very poor and only by much insistence could she be induced to take a very moderate amount of nourishment. The little sleep which she secured under the influence of hypnotics was disturbed by frightful dreams, the pulse was rapid and weak. Though there was little or no fever, there was at times profuse perspiration.

It was more than a month after she went to bed before she began to convalesce, and then the convalescence was slow, so that it was November 15th before she was able to resume her duties at the office, but she was unable to read, study, or do her work with the promptness, clearness of mind and dispatch which characterized her before the injury. And after a few months she was obliged to give up her position and take one which was less demanding upon her. Now, nearly two years after the accident, she has frequent headaches, rarely a week passing in which she is free from one, and slight mental or physical exertion is liable to precipitate a headache and pain in the back so severe as to necessitate her staying in bed for several days.

On examination a few weeks ago, I found that there was great sensitiveness to pressure over the cervical, mid-dorsal and lumbar regions, also extending out over the nerves emerging from those same regions. The wrist and knee-jerks are still very much exaggerated and she says that frequently her left leg gives out so that she cannot walk without limping. She certainly is far from well, continuing to manifest a train of symptoms such as were entirely foreign to her history previous to her injury in July, 1900.

In this case there is eliminated all element of litigation or hope of securing compensation or sympathy for her injuries. It certainly was not by reason of the advice given her by her physician, as is claimed by Dr. Bevan as the great source of these symptoms. Her physician has for many years been the surgeon for the Southern Pacific Railway and also for the Consolidated Electric Railway of Los Angeles, which has given him opportunities for observation of a large number of cases of traumatic neuroses, and prior to the observation of this case his views were very nearly in accord with those expressed by Dr. Bevan. All element of fright or long-continued observation of horrible scenes, such as sometimes occur in railway wrecks, was also entirely wanting in this case.

Case 11.

Miss J. H., age 17, with good family history and no previous ill health, a fresh, healthy-looking girl, who has been very active mentally and physically, in September, 1900, while playing, wrenched her right knee and thought from the feeling that the knee-cap was

thrown out of place. She could not walk on it for two weeks or more, but after going to the sea coast it gradually improved, and in six weeks it was all right again and she had no further trouble with it until the following June, when she noticed that the same knee felt weak, and one morning, on sneezing, experienced a peculiar sensation in the knee, followed by a slight degree of pain. Fearing that there would be a return of the former trouble, she kept very quiet, but in spite of favoring the knee, she gradually lost the use of that leg, so that she could not bear her weight upon it and was obliged to go on crutches for several months, during which time she was under the care of a physician, who tried a variety of treatments, external applications, elastic bandage, and finally a plaster-paris cast, which she wore for more than a month. After several months it began to improve, and this she now attributes to injections of iodoform emulsion.

The following September she was able to go to school, could go up and down stairs with the assistance of a cane and by Christmas-time, or six months after the beginning of the trouble, she had so far recovered that she considered her knee well and it has given her no serious trouble since. At times during the trouble with her knee, she had a peculiar sensation in her right hip, which she said was not exactly a pain, but felt very bad. Last November, while going down the steps in the evening, she fell, striking upon both knees. It did not hurt very much at the time, but she feared that it would cause serious trouble with her hip; however, she went that same night to a social gathering and the following day rode several miles to witness a ball game, and on her return home that night felt so much discomfort in the right hip, and it felt so weak, that she was sure there was to be a return of such trouble as she had had in her knee. This induced her to stay in bed for a week, but as there was no pain, swelling or other local evidence of trouble, she got up, but was unable to bear her weight unassisted on the right leg; since then she has found it necessary to walk with a cane and even then walks with a limp.

On making the most careful examination, I could not find that there was any pain or restriction of mobility or any disturbance of sensation, electrical reactions, or general muscular condition. She could walk with a slight limp by simply touching lightly a small cane, but when the cane was removed, found it absolutely impossible to sustain her weight for even a few steps. She is anxious to get along without the cane and certainly has no expectation of compensation or sympathy by reason of her hysterical paralysis.

The opponents of Erickson's views have long maintained that if the symptoms were due to the effects of the injury, they would become less pronounced as time went on and not arise after an interval of some days following the receipt of the injury. The fact that the symptoms are not complained of by the patient for many hours or sometimes for days after receiving the injury, has been explained by some authors as being due to the fact that the mind of the patient was too much preoccupied by the terrible scenes around him to notice serious personal inconvenience and pain. The cases, however, which we have related, show that at least in some cases there is no such explanation to be offered, as there was no fright, horror or mental shock connected with the accidents to mask or disguise the early appearance of the symptoms.

As I before remarked, we are inevitably largely influenced by our personal experience in our opinions of a given disease. The failure to observe a case of traumatic neurosis that does not have in it the elements of exaggeration or malingering, is likely to induce in our minds the belief that all cases are malingerers or grossly exaggerate their symptoms.

My conclusions from these cases are: 1. That there was no previous history of hysteria or neurosis. 2. That there was no severe convulsive force experienced by either. 3. That they were cases of traumatic neurosis and not of malingering. 4. That neither the advice or solicitude of the physician, nor the suggestions of friends or attorneys, anxious for litigation, caused the illness. 5. That there was no alarm before the injury, nor horror at the surroundings afterward, consequently that it was not caused by mental shock. 6. Traumatism was the exciting cause in both cases. 7. That the same conditions may hold good in other cases, even though there be litigation in connection with them.

I wish to acknowledge my indebtedness to Doctors F. K. Ainsworth and J. S. Champion for the opportunity to see and report these cases.

PERITONEAL ADHESIONS.*

THEIR SYMPTOMATOLOGY, PATHOLOGY AND PREVENTION.

By E. E. KELLY, M. D., San Francisco.

(Concluded from page 11 January JOURNAL.)

The Trendelenburg position, in pelvic and lower abdominal operations, by favoring the receding of the abdominal contents toward the diaphragm, removes them from the operative field and lessens the shock and lowered vitality due to handling. Martin, of Brussels, has suggested the use of sterilized olive oil in the abdominal cavity to prevent adhesions. Others have suggested the painting of raw surfaces with collodion. Robt. T. Morris has advised sprinkling the denuded surfaces with dithymol-diiodid, stating that the drug is insoluble in serous exudates, and that it forms with coagulated lymph a protective covering that cannot easily be brushed off. The same author has later used a very thin gold-beater's skin made from the peritoneum of the ox. By experiments upon rabbits he came to the following conclusion: Cargile membrane does not occasion suppuration; causes only slight adhesions which are absorbed in thirty days; causes very little disturbance of the peritoneum; does not furnish a culture medium for bacteria; adheres closely, does not need suture, is not easily dislodged and protects injured surfaces till endothelium reforms. Morris made use of Cargile membrane with great

satisfaction in a case of recurrent adhesions where the chemical film had been formerly used and had failed to prevent adhesions. Howard Kelly has suggested fixing the uterus in retroflexion to cover raw surfaces in Douglas *cul-de-sac*. After treatment is of great importance in preventing adhesions. The abdominal straps should not be too tight, as they fix the organs more or less, permitting adhesions to form before peristalsis has become re-established. The early use of cathartics has been advised to stimulate peristalsis, thus preventing adhesions of the intestines. Doubtless they may be useful in some cases, but since adhesions form in a very few hours, usually before the partially paralyzed bowel recovers its peristaltic tone, their utility must be limited. However, since recent adhesions remain soft for some time, it is well to stimulate peristaltic action as soon as the stomach will permit the use of laxatives. Early and frequent change of position is grateful to the patient and very useful in preventing adhesions, unless the patient is too tightly strapped. Cleveland has recommended the use of oxygen gas to inflate the intestines and to stimulate peristalsis. He claims it can be used earlier with less distress to the patient and more certain results than fluid enemata, and has the advantage of supplying oxygen to the tissues by its absorption.

In conclusion, it must be admitted that any and all of these measures will fail in a certain percentage of cases. Although prevention, the ideal result, is not always possible, we may, by the various methods herein suggested, minimize the evils arising from peritoneal adhesions.

DISCUSSION.

Dr. J. H. Barbat, San Francisco: There is no question but that the handling of the abdominal contents produces adhesions by roughening the surface, and the avoidance of any handling of the abdominal contents will necessarily limit the number of adhesions. This may be obtained by making short incisions and rapid operations. Large incisions, as Dr. Kelly has shown, necessarily expose the abdominal contents, and the exposure of the abdominal contents leads to the formation of adhesions. Therefore, operate through as small incisions as possible with safety. I have found that the introduction of any substance into the abdominal cavity favors adhesions rather than diminishes them. My best results were obtained by using massage, and it can be shown that a very large majority of the adhesions which do occur in every case in which the abdomen is opened, are temporary, or adhesions which break up of themselves, and after two years we will find very many cases which show no sign of adhesions; whereas, if all these cases were opened in one month, they would show adhesions. I speak from experience of operating on animals also.

Dr. A. Lobingier, Los Angeles: Dr. Kelly's paper touches on more prominent points than I often hear. The question of abdominal adhesions, as has been indicated by the last speaker, is not a question which reaches such large proportions when we consider how much of the abdominal surface is exposed, and

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how freely we are able to handle the peritoneum without damage, largely from the fact that many of these adhesions will become absorbed. Infection of the peritoneum has long been known as a cause of adhesions. Adhesions formed by an infected peritoneum are not so permanent as those which form in thick fibrous masses and are of a permanent character. It is well to remember that infection of the intestines is to be regarded seriously. I wish that Dr. Kelly had touched more upon the adhesions of the right hypochondrium, which are the most annoying. I have seen very mild adhesions between the pylorus and gall-bladder, very thin, narrow bands productive of persistent vomiting, absolutely intractable to anything but removal. We know that in our gall-bladder and pancreatic work we have had most serious disturbances by persistent vomiting, and always as a result of very slight adhesions in and about the lower end of the stomach and gall-bladder. Frequently the colon is involved. We find that the omentum may be knotted up, uniting the gall-bladder in a dense mass. I had a patient a short time ago who had been previously operated on for hernia, in whom I found the appendix lying on the under surface directly down past the internal ring. It was adherent for its whole dorsal aspect. It seems to me that the use of gloves will aid us very much in keeping the interior of the abdomen sterile. I use gloves in all operations, and have for ten years. Skin is always septic. I have used the Cargile membrane with the very best results. Dr. Murphy has used nitrogen gas instead of oxygen gas.

Dr. W. I. Terry, San Francisco: I think the adhesions due to mechanical cause are much more likely to be absorbed, and are absorbed quicker, than infected ones. This has been touched upon by Dr. Barbat, and I agree that adhesions do disappear in large measure when not due to infection. I wish also to add my word of approval in the use of rubber gloves. Not from the mechanical irritation, but from the point of cleanliness.

Dr. C. D. Lockwood, Los Angeles: I got here too late to hear all of the paper, but am very much interested in the subject. There is one thing that Krause has shown us—that the endothelium ruptured, reproduces itself. Consequently, I believe that what was said just preceding is true about mechanical adhesions recovering much more rapidly than infectious ones. And I believe that the use of rubber gloves is a valuable thing. Norris claims that the long exposure and the use of rubber gloves increased the danger of adhesions. In this connection, I believe that the Murphy rubber dam is a valuable thing. The whole abdomen is covered with a smooth surface, and the abdominal organs and omentum can be laid upon the abdomen without great injury, as when laid upon gauze sponges. I believe it will be an important factor in the prevention of adhesions.

Dr. L. Brown, San Francisco: I have also been very much interested in this subject. It is very true that the endothelial cells do reproduce themselves in a few days; sometimes almost over night. Sometimes the stitch placed in the peritoneum will be covered over with peritoneum without adhesions. These adhesions probably had disappeared in a very short time. I do not think they cause any trouble. We have not as yet a good classification of adhesions. I believe that adhesions due to some causes are more difficult to cure than adhesions due to other causes. I have seen a good many patients operated upon for adhesions with or without previous operation.

Dr. J. Rosenstirn, San Francisco: I believe the subject of abdominal adhesions interests every ab-

dominal surgeon. Perhaps there is not enough stress laid upon the necessity of uniting severed surfaces. Pain is due to adhesions formed on rough peritoneal and ununited peritoneal surfaces during operations. In those cases, naturally, the possibility of a double cause is present. I believe that it should be impressed upon all that every peritoneal surface should be well united before closing. The objection against gloves by prolonging the operation can be easily overcome by using the rubber gloves, which certainly allow the handling of the peritoneum and organs that the fingers allow. They have been used for quite a long time.

Dr. O. O. Witherbee, Los Angeles:—Just a word as to the symptoms of adhesions. I do not think that we can satisfy ourselves by the amount of pain as to whether adhesions have actually formed. I believe that if adhesions have formed that we have pain invariably. I am satisfied in many cases, especially in the case of appendicitis and perforation and discharge, where the intestines are agglutinated and permanently adhesive, that these patients go on with very little or no pain. When we have some movable stricture fixed, as the reader of the paper said—for instance, fixation of the appendix in broad ligament, we will have pain. Whether pain or not, does not determine whether there are adhesions or not. I have held the abdominal cavity open for five hours and ten minutes, and my patient is now living, and so far, she has no adhesions or symptoms of them up to the present time. With reference to the gloves: if you are uncertain that your hands are clean, you should certainly wear gloves, but if you can prevent the perspiration of the hands and forearms, it is better to operate without gloves. The ordinary operator, I am sorry to say, does not take enough pains in sterilizing his hands. He scrubs for the ordinary length of time, then he goes through the sterilizing solution and makes plunges into the bichloride, and from that he goes into the sterilizing solution to wash off the bichloride which he is depending upon. I maintain that you can sterilize the hands with bichloride after ten minutes. If you sterilize any instrument with bichloride without boiling, you would not think of doing it inside of ten minutes.

Dr. E. E. Kelly, San Francisco:—I have very little to add. I approve of everything said. There is no question but what the time of the operation has considerable effect upon the formation of adhesions. Dense adhesions are the result of destruction of the serous membrane more than simply destruction of endothelium. In the pelvic cavity and in the region of the liver, especially in the pelvic cavity, however, a raw surface of the adherent intestinal coil is very dangerous because it binds the intestinal loops to one another. Adhesions are not followed by any severe pain or after results in cases of drainage, because the adhesions are between surfaces in their natural position, but where organs are in an abnormal position with adhesions to the abdominal wall, then the symptoms follow. There is no doubt but what adhesions occur many times which never produce any symptoms at all. I believe in the use of gloves.

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CASES OF TUBERCULOSIS OF THE GENITO-URINARY TRACT, WITH REMARKS.*

By GEORGE CHISMORE, M. D., San Francisco.

(Concluded from page 8, January JOURNAL.)

Case 3.—C. N., aged 21, American, single, clerk. Health good until an attack of la grippe in the early part of 1895, after which he began to suffer from frequent micturition; urine tinged with blood at times. Pain in penis and also in neck of bladder, which grew gradually worse. His bladder was washed out, but his suffering increased so much that this process was soon omitted, and when he came to me, June 27, 1895, there has been no local treatment for some time. He was then passing 1520 cc. of urine in 24 hours, 20 voidings. It was reddish, turbid, strong, ammoniacal odor, alkaline, reaction sp. gr. 1017; trace of albumen; no sugar; contained 18.24 gms. of urea. Sediment, copious, reddish, viscid. Crystals of triple phosphate numerous. A few pavement cells, pus and blood corpuscles; no casts. Examination for tubercle bacilli negative. The symptoms were so strongly indicative of stone that he was searched with negative results. The unusual amount of disturbance which followed led to the suspicion of tuberculosis of the genito-urinary tract, in spite of the failure to find the bacillus. All local interference was therefore avoided until June 30, 1897, when, failing to find the tubercle bacillus in many examinations, I again searched him for stone, with negative results. He had lowered the number of daily voidings to eight, but they were always attended with pain, and after the examination became more frequent for nearly a month. On October 9, 1897, he had a sharp attack of pain in the left kidney, easily controlled by an anodyne, and he noted bright blood in the urine the following morning. On January 18, 1898, he had a bad spell, during which he had to pass his urine as often as 20 times in 24 hours. The tubercle bacilli were now found, and since that time it has always been easy to demonstrate their presence. Under cod liver oil, tonics and general hygienic measures, he has improved somewhat, gained a little in strength, has been able to work, and is apparently steadily gaining. On April 24, 1898, he reports by letter as not suffering so much, but passing urine hourly during the daytime and five times at night. At no time as yet has there been any lesion of the prostate gland, testes or cord.

Examination, April 4, 1903 (eight years after first attack): In excellent health. Married eleven months since. Sexually normal. Voids urine six to seven times daily. Promised to send urine for analysis and did it. His urine was normal in quantity, devoid of noxious elements, no bacilli.

Case 4.—A. D. K., American, aged 50 (?), attorney, widower. Came under observation May 8, 1896, with epididymitis of the right side; left subsequently similarly involved. Attributed his attack to muscular strain. Had suffered years ago from urethritis, followed by obstinate gleet, from which he at length recovered. General health good. Family history of tuberculosis on mother's side. *No frequency of micturition.* The diagnosis of tuberculous epididymitis was made from the peculiar woody masses of deposit that made up the indurations in the organ. Examination of urine 1440 cc. in 24 hours. Voided 4 times. Bright yellow, clear, translucent, normal odor, acid, sp. gr. 1017. No albumen nor sugar. 21.6 gms. of urea. Copious, white cloud of sediment. No crystals. A few pavement cells. A few corpuscles. No casts. No tubercle bacilli. With but little pain, the case went on to suppuration, attended with moderate hydrocele, and the left epididymis pursued a similar

course. In the discharge from the abscess tubercle bacilli were repeatedly found. It was more than a year before the last sinus closed. The patient attended to business all the time.

Examination, March 25, 1898: In good health. Tubercular masses small, but plainly perceptible to the touch in each epididymis. Sexual appetite unchanged and power not impaired, but thinks the discharge on emission more scanty than formerly.

Examination, April 15, 1903. Still in excellent health. Has been married two years. Sexually all right, but no children.

Case 5.—D. H. B., aged 29, American, married, laborer. General health poor for several years. Gonorrhea 8 years ago. Perineal section for stricture and urethral fistula in 1888; healed promptly. In November, 1894, he began to suffer from frequent micturition. His bladder was washed out three times, when he became so much worse that that mode of treatment was abandoned. About two months before coming to me the fistula reopened in the perineum. Saw him first June 25, 1895. He was thin and worn. Voided urine with great pain and at short intervals, 20 times during 24 hours; the tubercle bacilli were present in great numbers. There was a tight stricture of the deep urethra just anterior to the internal opening of the fistula. So far as could be made out, the lungs were not involved. Perineal section was made on June 26th, and healing was fairly prompt. He put on flesh, gained strength, and returned to the country July 30, 1895, and went to work. He came back to me September 22, 1895, in very bad condition. Micturition frequent and painful; urine loaded with bacilli. By the end of October the right kidney could be felt enlarged and tender. On account of the great pain in the kidney, operation was considered; but, the suffering lessening, it was not done, as it was plainly evident that a fatal termination was near at hand. He sank progressively and died January 31, 1896.

Autopsy: Emaciation extreme. Right lung stuffed with crude tubercles; left lung, considerable amount of tubercular deposit. Heart normal. Bowels matted together by inflammation of numerous and extensive tubercular foci. Right kidney three times natural size, firmly adherent to adjacent organs, and riddled by tuberculous abscesses. Ureter dilated and tubercular. Left kidney normal. Bladder wall soft and very easily torn. Entire mucus coat a pulsatious mass of tubercular degeneration. Prostate normal in size, burrowed by sinuses.

Case 6.—R. M., aged 16. This boy had excellent health up to a few months ago, when, after a long ride in the drenching rain, he began to pass water frequently. He lived in the country and his family physician tried simple medicinal treatment, without success. He was brought to me April 4, 1901. He was passing urine thirty times in twenty-four hours; it was reddish, turbid, strong odor, and sp. gr. 10.11; it contained .02 albumen and 14.20 gms. urea; crystal of oxalate of lime, blood and pus corpuscles plentiful. There was always pain in passing water, for the most part in the glans penis, with desire to stool, and he was subject to paroxysms of great severity at irregular intervals. He was in fair physical condition and had no other ailment. He remained under my care three months. I suspected tuberculosis at once and caused repeated examinations to be made; all were negative. The pain resembling the pain of stone, and not finding bacilli after a ten days' search, I decided to pass a searcher; this I did under cocaine. The urethra was very sensitive and would only admit No. 10. F. The bladder would only hold 3 drachms. I found nothing in the bladder, but just as the instrument left the neck I

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had an elusive sense of touching a small stone. This decided me to have recourse to a gradual dilation, in order to get room for a small lithotrite. I accomplished this by gently passing sounds under cocaine twice weekly, seven times; then a thorough search satisfied me there was no stone. I was now sure that the case was tuberculosis, although I never found the bacilli. I frankly explained my views to his parents, and they took him home. I felt at that time that my instrumentation had been unwise and that his sufferings had been increased thereby. Some time after leaving my care he was taken to a surgeon, who instituted a course of lavage with injections of argenti nitras; this was not continued very long and he had no other local treatment. About a year after his attack, after great suffering, he died. Before his death his scrotal contents became distinctly tubercular.

In closing, permit me to present two cases which I saw in consultation—one with Dr. Ray Lyman Wilbur, the other with Dr. Herbert C. Moffitt. These gentlemen have kindly sent the following reports:

Case, G. M. R.—Dr. Ray Lyman Wilbur: "Patient strong, well-nourished man. Had an irritable bladder from boyhood. Operation for appendicitis in 1898. In winter of 1900 began to have trouble with bladder, frequent urination, pain, with pus and albumen in the urine. Greatly relieved by mild urinary antiseptics. First saw him in March, 1901. Symptoms all mild and all referable to the bladder. Pus and albumen in the urine, but no casts. He was treated with various diuretics and urinary antiseptics and hygienic measures, with indifferent success. In the summer of 1901 he was in a San Francisco hospital, and was there treated with argenti nitras injections. Repeated examinations revealed no tubercle bacilli. A cystoscopic examination, made May 24, 1901, showed several vesical ulcers. Twice during the summer he had a complete suppression of the urine for 24 hours. In August, 1901, an epididymitis appeared on the left side, and it was taken as confirmatory evidence of genito-urinary tuberculosis, although no bacilli had been found, and all local treatment was stopped.

"September 28, 1901. Consultation with Dr. Chismore and Dr. Krotoszyner. Palliative treatment and strict injunction against surgical procedures.

"In December, 1901, patient went to Baltimore, where he had many relatives, partly for a change and partly for treatment. At that time he was urinating frequently, but had not lost weight.

"On January 4, 1902, numerous tubercle bacilli having appeared in the urine, and there having been an increase in the size of the epididymis, he was operated upon as follows: An epididymectomy on the left side and a castration on the right. The incisions were made high up in the groin, and the vas deferens freed up to the internal ring. Before closing the wound the vas deferens was brought out through the skin at the upper angle of the wound and there left to drain. The object of this was to allow the escape of as much as possible of the tuberculous matter from the vesicles as might flow through the vasa deferentia, and thus divert as much of it as possible from the urethra and bladder. The epididymes were partially involved on both sides, but both testicles were free from disease. The castration was done largely for its atrophying effect.

"The patient rallied from the operation and was better for a short time. Then he began to get worse; the urination became more frequent; there was a decrease in weight and much pain. In March, 1902, he was still fairly strong and vigorous, but was getting

gradually worse. In May, 1902, the frequent urination and the presence of constant pain led to a second operation for suprapubic drainage of the bladder. A small incision was made in the median line of abdomen and the wall of the bladder stitched to it. Through this opening the urine was drawn and the bladder was irrigated. The urine was now heavily charged with albumen, mucus and pus, but had no casts in it. The symptoms were much relieved by the operation, but the patient sank into a septic state, and after two months of fever, vomiting, hiccoughs, etc., died in the latter part of July, 1902.

"An autopsy showed a complete infection of the genito-urinary tract, with almost complete atrophy of one kidney, its place being taken by a sac of pus. There were tubercular foci in the lungs, liver and elsewhere in the body."

Case, Miss C.—Dr. Herbert C. Moffitt: "Saw her first February 24, 1900. Her age was then 24. Never any history of tuberculosis in family. She was absolutely well until six years previously, when there was some pain and difficulty in passing urine. She was at that time in Europe and was said to have malaria. In October, 1898, treated with Dr. Winslow Anderson for some obstinate acne, and had some local bladder treatment for a time, but this was discontinued on account of pain. In January, 1899, inflammation of the left mastoid, but no operation. April 20, 1899, severe bladder pain, called acute cystitis by Dr. Eastman of Berkeley. Since then she has had considerable pain over the bladder and down the left thigh. Paroxysms of pain in the inner and front of the left thigh extremely severe; worse on standing or on exercising. Examined for stone of bladder with negative result, with quite a severe hemorrhage afterward. Bladder was then washed for some time and said to be all right locally, but washing was followed by more pain. An operation was contemplated for resection of the pudic nerve for some reason or other, but was postponed. Of late large hemorrhages with clots. Pain very severe in March, 1900. Examined at Lane Hospital; great irritation of bladder; much pus in urine; very little blood; no evidence of kidney disease, and, after some trials, tubercle bacilli found in the urine by stain, confirmed by animal experiment.

"Attempt to separate urine from either kidney by the Harris segregator gave no result. Ulcers were seen in bladder. Improved somewhat under methyl blue, but some months later relapsed and was seen by Drs. de Vecchi and Chismore, who suggested no operative interference, but hygienic treatment. Since this time she has led an open-air life. The only drugs used have been cod liver oil and occasionally methyl blue. There have been two distinct relapses with hemorrhages and considerable pain, but for long periods she has been able to get around as usual, and has then been at normal weight and free from all but very slight bladder irritation. At present she is in Los Gatos with return of bladder pain and irritation, but is under no treatment beyond cod liver oil.

"Additional history, gotten of late, developed the fact that she remembers some indefinite bladder trouble as far back as childhood. Had whooping-cough at four years of age, and a cough two years afterward. Later an abscess in the left ear. Examination of late years always failed to show any lung involvement."

The last session of the University of Pennsylvania appropriated \$25,000 to equip a laboratory for X-ray research and Finsen's light apparatus at the Hospital of the University of Pennsylvania. Dr. Henry K. Pancoast has charge of the work.

OCCIPITO-POSTERIOR POSITIONS*.

By GEO. L. COLE, M. D., Los Angeles.

DURING a somewhat limited practice in obstetrics, derived from a general practice extending over a period of something like sixteen years, there perhaps has been no particular line of cases that has given me so much annoyance as those which have presented themselves in occipito-posterior position.

In looking up the matter in the various text-books, it has seemed that the literature upon the subject is more meager than the importance of this class of cases deserves. The majority of text-books devote from one to three pages to the subject. One is impressed with the fact that more attention in the classroom, more explicit directions in the text-books, and more thought in general upon the subject, by the young practitioner especially, would be the means of putting him in a better position to properly handle these trying cases that so often result in more or less injury to the maternal parts and not infrequently result in death to the new-born. For instance, Lusk, in his most admirable system of midwifery, devotes only one and one-half pages to the subject, but throws a vast amount of light upon the mechanism of rotation in such cases by a quotation (which will be given later on) from Dubois. Carrigues is somewhat more explicit in his handling of the subject, devoting three pages which form a most commendable article upon the subject.

King in his little "Manual of Obstetrics," devotes about three pages to occipito-posterior presentations, and handles the topic very masterfully. He holds that about 96 per cent. of these cases correct themselves by being transformed into occipito-anterior positions before delivery is completed. He furthermore claims that in the remaining 4 per cent. much may be found to aid anterior rotation, especially where an early diagnosis is made. Later on, his expedients to promote anterior rotation will be quoted. Grandin and Jarman, in the third edition of their "Practical Obstetrics," devote about three pages to occipito-posterior positions, and a liberal quotation from them will be made later.

In being called in as consultant in a difficult obstetrical case, it is not of unusual occurrence to find that a long-protracted case, which is about to be terminated with instruments, is due to this faulty position; and it is not of infrequent occurrence that the faulty position has not suggested itself to the attendant. While perhaps up to the time of such consultation no procedure could have resulted in a conversion to an anterior position, yet with a true understanding of the faulty position, the attendant would have been less impatient of delivery and would have given, ordinarily, a more guarded prognosis as to the eventual out-

come. While these cases will possibly often correct, or partially correct, themselves if time be given, it is somewhat questionable as to how much good we can accomplish by interference. The slow advancement of the head; labor usually attended by more than the ordinary amount of pain; necessity for an unusual amount of patience; the frequency with which partial or complete laceration of the perineum occurs; the amount of pressure that is necessarily made upon the cranium of the child by the forceps; and the frequent need for immediate repair of the perineum are points well worthy of consideration. As pointed out by Grandin, "a tedious first stage, characterized by short, nagging pains, is a fairly uniform accompaniment of the instances which should cause anxiety." It is here that a careful manual examination, taking into account later on in the course of labor the exact positions of the two fontanels, should enable us to arrive at a correct diagnosis.

As I have intimated before, the following experiments of Dubois, taken from Lusk, give us a clew to the part played by the perineum in the anterior rotation which not infrequently takes place when an abundance of time is given:

In a woman who had died a short time previous in child-bed, the uterus, which had remained flaccid and of large size, was opened to the cervical orifice, and held by aids in a suitable position above the superior strait; the fetus of the woman was then placed in the soft and dilated uterine orifice in the right occipito-posterior position. Several pupil-midwives, pushing the fetus from above, readily caused it to enter the cavity of the pelvis; much greater effort was needed to make the head travel over the perineum and clear the vulva; but it was not without astonishment that we saw, in three successive attempts, that when the head had traversed the external genital organs, the occiput had turned to the right anterior position, while the face had turned to the left and to the rear; in a word, rotation had taken place as in natural labor. We repeated the experiment a fourth time, but as the head cleared the vulva the occiput remained posterior. Then we took a dead-born fetus of the previous night, but of much larger size than the preceding; we placed it in the same conditions as the first, and twice in succession witnessed the head clear the vulva after having executed the movement of rotation. Upon the third and following essays, delivery was accomplished without the occurrence of rotation; thus the movement only ceased after the perineum and vulva had lost the resistance which had made it necessary, or, at least, had been the provoking cause of its accomplishment.

Now, if we accept these experiments of Dubois, together with the statement of King that 96 per cent. of posterior positions correct themselves, are we justified in radically interfering, as Grandin suggests, long before the head reaches the perineum? Here I quote at length from page 418 of the latter's most commendable work:

For the purpose of rotation nothing can take the place of the aseptic hand, aside from the fact that at one and the same time the hand may detect any additional anomaly hitherto unsuspected, such as pelvic deformity, which, aside from being a further

*Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

cause of slow or impossible engagement, may alter the field of election at the very best time (from the standpoint of both the woman and the fetus)—that is to say, when the conditions are still favorable for version or some other procedure. When the occiput rotates backward into the hollow of the sacrum, we are face to face with what—there is uniform agreement—constitutes one of the most difficult cases in obstetrics. The clean, educated obstetric hand at the pelvic brim is a source of positive safety to both the mother and child, compared with waiting until exhaustion calls for, for instance, the forceps within the pelvic brim. A tedious first stage, characterized by short, nagging pains, is a fairly uniform accompaniment of the instances which should cause anxiety. It seems clear that manual examination at this time will often lead to the adoption of a procedure which will alter the prognosis of and lessen the difficulties attendant upon the persistent oblique and sacro-rotated occipital position. This procedure, which has been persistently advocated by the authors, has been much criticized on the ground, first, that internal rotation of this nature is not permanent, and, secondly, that, dilatation having been accomplished and the hand being in the uterus, the wiser plan is to perform podalic version. The first objection falls to the ground in face of the established fact that over and again the maneuver has succeeded. Those who fail simply twist the head. They do not rotate the body. The second objection carries more weight, and when the dystocia is due to the pelvis and not to the fetus its truth is now granted. But, if the size of the fetus added to the malposition is the cause of the tedious labor, it will be found advantageous in all instances except those of emergency to give nature a chance to dilate the pelvic canal as also to mold the fetal head. It is a sound obstetric rule not to interfere needlessly either by forceps or version.

The following statement by King in his Manual is so pertinent and lucid as to the management of these cases that I cannot do better than quote in full as follows:

Various expedients have been devised to promote anterior rotation of the occiput when it does not occur spontaneously. Thus, since we know posterior rotation is generally the result of imperfect flexion (the forehead being too low, the occiput too high), we may strive to remedy the difficulty by making the flexion perfect. This can be done by pressing two fingers of one hand upon the forehead during the pains so as to push it up, or at least keep it from coming lower, while the force of uterine contraction is then expended in depressing the occiput. A vectis may at the same time be applied over the occiput to assist in pulling it down. The object is to get the occiput so low that it will pass below the spine of the ischium to the anterior inclined plane and rotate forward, while the forehead is kept high enough to pass above the opposite ischial spine and rotate backward. Rotation forward may sometimes be accomplished with forceps while making traction. If the pelvis be large and the operator's hand small, the latter may be passed in alongside of the head, and the occiput drawn obliquely downward and forward to the pubes. Another plan: Etherize to full anaesthesia. Pass a hand into vagina; grasp head, and steadily and gently push it up out of the pelvis, above superior strait. Then flex it, and rotate occiput forward. Hold it so until the pains, aided by pressure of other hand on abdomen, push it down again into pelvis, in its now occipito-anterior position. Forceps may be required to complete the delivery.

In conclusion we may say that (1) occipito-posterior presentations are tedious and painful, and form one of the most disagreeable classes of obstetrical cases. (2) That an early diagnosis of the position is desirable. (3) That there is often a question as to the best method of dealing with them. (4) Abundant time should be given when practicable, before applying forceps. (5) In using the forceps, tractions should be made with the handles as low as possible and pressure on the head should be frequently released. (6) The perineum is frequently, partially or completely lacerated and should be repaired at once.

DISCUSSION.

Dr. D. A. Hodghead, San Francisco — I am very sorry that Dr. Briggs is not present to open this discussion. This is a very interesting paper, and the question is a very important one, because the condition is extremely difficult to handle. I wish to compliment Dr. Cole upon the excellence of the paper, and to call attention to a few points. First, as regards the first stage of labor. In all these cases of malpresentation, the first stage is tedious, and I wish to emphasize this fact—the old theory of *rigid os*, which the obstetricians have talked so much about, except in cases of malignancy, is probably a myth. Bear this in mind, that when you have a tedious first stage, you have a malpresentation. That is the time to determine whether there is a malpresentation or not. If the head is properly presenting, you will not have rigidity of the cervix. As to rotation, we know that the true mechanism of the occipital presentation is extreme flexion, rotation of two-fifths of a circle, becoming the occipito-anterior, and then the normal mechanism. There are two rules as to the course of these cases, or as to why this rotation takes place. One is that the body will move in the direction of least resistance and in connection with that, the most dependent portion of the presented part will always rotate to the front. We can do away with the planes of the ischium. They cut very little figure in the rotation of the head. The point is to secure extreme flexion by some method; by pressing on the forehead or bringing down the occiput. Now as to interference. I would not allow that to stand in the way too long for these reasons: That too long a continuance of the second stage is dangerous to the mother and to the child by pressure on the head. If you do interfere with the use of forceps, place them in position just as in any other case, but before locking the instruments, I bring them down upon the perineum well and then, before making traction, lift the handles, and improve the flexion. If you can secure the head by means of the forceps you can increase the flexion, and then by making traction, can bring the head firmly down on the perineum. When you remove the instrument the rotation will take place itself. I can remember in the first case I ever had with occipito-posterior position, I did just this thing—pressed the forceps back against the perineum before locking, and then elevated somewhat, and brought the head against the floor of the pelvis, then removed the instruments, and the head rotated. This rotation will take place very quickly if you get the flexion extreme and the head down on the perineal floor.

Dr. Z. Malaby, San Francisco—The point that is usually neglected in these cases is abdominal palpation. It should be part of the routine in all cases. I have been instructing the students in the last few years to practice abdominal palpation in all cases.

When you get a case that is going to be one of posterior presentation, if you diagnose it early it is possible to rotate the head before it is engaged.

Dr. Geo. Cole, Los Angeles—Within a day or two before coming here I saw an article on the same subject. In speaking of these cases the writer advised two maneuvers: One was that as soon as the diagnosis was made in the early stage, the patient should remain in genu pectoral position and that the position of the body would often help to a better position, which I think is overdrawn, because I think the change of position takes place in the early stages, not when the head gets down near the perineum. But as to whether that position is of benefit or not, I am not able to say. The other suggestion was, in applying the forceps put them on in the reversed position; put the convexity to the front. His object in doing that was to make more perfect flexion. The point of the blades were pointed down directly toward the rectum, and while in the hands of a very suitable man this might be tried, yet to my mind it would simply result in injury to the rectum. In many cases we find a position where there is a large roomy pelvis and moderately sized child. Leave them to nature and the application of forceps becomes an easy matter. But where there is a small pelvis and a large child, it is exceedingly difficult.

WAS IT A CASE OF MENINGEAL HEMORRHAGE, HYSTERIA OR MALINGERING?*

By H. J. B. WRIGHT, M. D., San Jose.

TO the general practitioner the obscure cases of hysteria and the cases of malingering are often embarrassing and sometimes hurtful. Until the stability of the nervous system is greatly increased and cupiditas as greatly decreased, we may expect to find cases of hysteria and malingering. Medico-legal literature contains abundant evidence of the credulity and ignorance of physicians when dealing with hysterical and malingering patients. A study of the following case may assist us in our efforts to learn how to escape from the pitfall of hysteria and the tricks of the malingerer.

It should be known at the outset that the patient is a medical gentleman who has done much surgical work, and who is familiar with the anatomy and physiology of the human body, and is thereby more capable of deceiving his medical attendant than the untutored person would be. There is also a psychological possibility in the case which should not be overlooked. The patient is carrying an accident insurance policy which gives an indemnity of \$100 per week for a period of 102 weeks. Should the disability of the policyholder continue through that period, the accident company will be liable for the sum of \$10,400. The question before us is not whether the company is liable, this being a purely commercial question, but whether the hope of gain has psychologically caused the patient to exaggerate his sufferings without being guilty of intentional wrong.

Fifteen physicians, all gentlemen of ability, have seen this patient, and at least two of the

number have recently expressed themselves as believing the patient was not seriously injured. Of the others, one said: "It is a case of concussion of the brain"; another said: "It is a case of voluntary convulsions," and three said: "It is a case of meningeal hemorrhage," while another said: "It is a case of shock resulting in hysteria, or traumatic hysteria."

The opinions of these medical gentlemen are not to be pooh-poohed, for they are the opinions of men who have much diagnostic ability. Unfortunately, one of these medical gentlemen, who studied the case for several weeks, expressed an opinion which called in question the veracity and honesty of the patient, and incurred the displeasure of the patient's wife, who gave the doctor a public horsewhipping. The patient's family history contains nothing of importance in this connection. The personal history shows a large and varied experience in the affairs of life. He lost a little finger and the corresponding metacarpal bone of the left hand, through a gunshot wound. He had septicemia a few months before the present illness. From this he completely recovered, except that it left the skin of the anterior portions of his chest quite discolored by irregularly deposited pigment. At the time the injury, the effect of which we are to study, was received, he was in the full vigor of manhood, at the age of fifty-nine.

July 8th, 1902. While riding in a railway coach, with his elbow on the open window sill and his chin in his hand, he cried out that something had struck him and that he was in great pain. A physician, who was near, found a bluish colored, irregular circular spot about one inch in diameter, over the right coronal suture, about three inches below the median line of the head. There was no abrasion, nor did palpation give any evidence of fracture of the skull. A stone the size of a man's fist was found near the patient. At the end of about twenty minutes the patient lost consciousness, and had a number of convulsions, general in character. The comatose condition continued for 36 hours, during which time patient had many convulsions. At the end of 48 hours his mind was clearing, the pupils were dilated and left hemiplegia was discovered.

On the 5th day he had difficulty in speaking, but the nurse's notes do not disclose the nature of the difficulty. The convulsions continued to recur at irregular intervals.

On the 7th day the temperature, which before had been normal, rose to 100.2-10, pulse 74, respiration 27. He complained of pain in right side of head and in right ear. During the convulsions, which were less severe than at first, the facial muscles twitched and froth appeared between the lips.

The notes do not state whether the muscles on the left side of the body were involved in the convulsive movements at that time or not.

On the 8th day the temperature was 100, pulse 66, mind weak.

The 9th day the patient had 33 convulsions. He was always unconscious during these paroxysms.

The 12th day, ophthalmoscopic examination showed normal or slightly pale fundus, nothing wrong with the media, but there was hemiopia of nasal side of right eye, the vision of left eye being undisturbed.

* Read at the Thirty third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

About this time the nurse says she saw the patient carry his left hand and forearm from under the bed-covering and place it over the abdomen.

August 6th. Temperature 103, leeches applied to head.

August 8th, 1902, or 20 days after receipt of injury, patient was first seen by the writer. Decubitus dorsal; patient well nourished; skin clear except as above noted; nothing characteristic about facial expression; ideation is impaired; slight aphasia; unable to recall anatomical terms with which he was quite familiar before the injury; pupils normal in size and reaction to light. There is absolute loss of vision in nasal one-half of right eye; vision of left eye normal. There appears to be complete loss of voluntary motion of the left upper and lower limbs, which are anesthetic and analgesic. A needle plunged under the left thumb-nail causes no pain; patellar-tendon-reflex exalted on both sides; plantar-reflex acute on right side and nil on left side. The convulsions now consist of muscular waves which run over the platysma myoides, the sterno-cloide-mastoids and possibly some other muscles of the cervical region, throwing the head forward and somewhat to the left. At the same time the levator-palpebrae superiorii and the occipito-frontalis muscles elevate the brows and upper lids, causing the palpebral fissures to be peculiarly broadened; the eyeballs are, at the same time, rolled downward. These irregular muscular movements are coincident with loss of consciousness. The seizures last from one to three minutes.

22d day. Temperature 101, pulse 80, respiration 32; today he had clonic convulsions involving the cervical muscles and also those of the right side of the body, while the paralyzed members remained in a quiescent state. These convulsions are peculiar in this: they are broken by periods of repose which last from one-half to two minutes, when the convulsive movement begins again to be soon followed by another period of repose. These convulsive cycles last from five to ten minutes. Today the patient throws himself about in a violent manner, necessitating restraint; cantharidal-vesicant was applied to head and blood soon appeared in urine attended with strangury.

Fourth week. The cervical muscles are not now involved in the convulsions. The temperature today is 101, pulse 100, respiration 16, face pale. During the past two weeks he has voided from 12 to 18 ounces of urine daily, the specific gravity ranging from 1020 to 1028.

August 25th. Today he had spasm of right calf and delirium, the respirations during the seizure running from 40 to 50 per minute.

August 27th, 1902. Fifth week. The respiratory act was greatly disturbed today. At 3 A. M. the respirations numbered 60 per minute; at 4 A. M. they were 20 per minute; at 5 A. M. they were 16 and at 5:30 A. M. they numbered 60. During the seventh week the temperature, pulse and respiration were about normal. The convulsions are frequently preceded by sensory aura in the right side of head, which is described by the patient as traveling to the ear and immediately thereafter he becomes unconscious. Electro muscular reaction is normal in the skeletal muscles of the right lateral one half of the body. The left deltoid and the left biceps and the left quadriceps extensor respond very slightly to the faradic current. All other muscles of the left lateral one-half of the body are unaffected by this current.

Eighth week. Convulsions recur only at night. The daily secretion of urine rarely exceeds 8 ounces. It is free from blood, sugar, albumen and casts. The spot where the stone is supposed to have struck

is hypersensitive. The patient is now able to lift left elbow until arm stands at right angles to the body.

November 21. Has frequent attacks of vertigo and sometimes vomits. The hemiopia has entirely passed away. Patient is pleased to show his improved condition. Electro muscular reaction is almost nil in trapezius, latissimus-dorsi, erector-spina-mass the flexors and extensors of forearm and hand and the muscles of the leg and foot of the left side. The electro sensory function is present to a slight degree in left arm and left thigh, absent in left forearm, hand, leg and foot; the left ankle is edematous.

February, 1903. Patient is much improved. The nocturnal convulsions return at intervals of from three to five nights; they are similar in character to those of the past, coming on generally during sleep and as often passing away without awakening the patient. At the commencement of the attack the patient utters a peculiar cry and immediately has clonic convulsions affecting right lateral one-half of the body and the facial muscles. The convulsive movements of the right side of body being unopposed by the paralyzed muscles of the left side, the patient frequently throws himself prone, in which position he struggles, moans and occasionally bites his tongue. The respiratory muscles are implicated, seriously disturbing the respiratory act and the right thumb is drawn into the palm. At the end of a short time (from one-half to three-fourths of a minute), the voluntary muscles become quiescent for one-half minute and then the clonic convulsions begin again. Sometimes the first convulsive attack lasts three minutes, to be followed by half a minute of repose. During all these movements both left extremities remain perfectly limp.

March 3d, 1903. Both the flexors and the extensors of the left forearm and hand give electro-reaction, but voluntary motion of forearm is almost nil and there is marked wrist drop. Muscles of the left great toe respond slightly to faradic current. The left hand is still anesthetic; there is atrophy of the left spinatus muscles and the left forearm and finger muscles. The left arm measures 11.2 inches less than the right arm. To prevent this atrophy, the faradic current and massage have been used during the last five months. The left ankle is now quite edematous and the finger and toe nails are yellow, rough, ridged and brittle. The mind is clear. He still insists that he will soon be down town on his crutches. He still has nocturnal convulsions.

In differentiating this case, the following summary may be useful:

First—A man of fifty-nine years of age, in the full vigor of an active and successful life, claims he has been hit on his head; a stone is found near his body in the railway coach and his scalp is contused. Second—At the end of twenty minutes he becomes comatose and has clonic convulsions of all the skeletal muscles. Third—Thirty-six hours thereafter consciousness is regained, but convulsions continue to recur at intervals of from one to two hours; marked impairment of ideation with slight aphasia. Fourth—Right monocular nasal hemiopia, which passes away after thirty days. Fifth—Left hemiplegia with recurring epileptiform convulsions affecting right side only. Sixth—Nurse states patient was seen to carry paralyzed hand and forearm about quite freely during sleep. Seventh—Temperature is above normal much of the time for a period of

six weeks. Eighth—Respiration often very irregular and pulse often abnormally slow. Ninth—Urine fourteen to eighteen ounces daily during several months. Ten—Anesthesia and analgesia in left half of body except face. Eleventh—While right side of skeletal muscles is convulsed, the left side remains motionless; patient often passes from sleep into fit. Twelfth—Plantar reflex acute in right foot, nil in left foot. Thirteenth—Electromuscular reaction normal on right side, nil on left. Fourteenth—Patient expresses a strong desire to recover.

The diagnosis of "voluntary convulsions" is absolutely untenable, for the convulsions recur during sleep while volition is in abeyance. It should be said in justice to the physician who made such a diagnosis that he has not seen the patient since the convulsions recur only at night during sleep.

That the case presents many of the manifestations of hysteria is quite true; for instance, clonic convulsions of the skeletal muscles on right side, while those on left side are flaccid; monocular hemianopsia without ophthalmoscopic evidence of retinal disturbance, and fits lasting for several minutes, broken by periods of repose. But the diagnosis of hysteria is as untenable as that of voluntary convulsions, for the paralyzed muscles have lost their power of electrical reaction. In hysteria the muscles react normally to the faradic current. We still have the statement of the nurse that she saw patient carry his unaided hand to his head on three occasions during sleep. If the patient did this muscular feat during sleep, he could do it when awake, and such an act would be absolutely fatal to any theory in the case, except that of malingering.

Keeping in mind the physiologic and pathologic facts described, we are compelled to say that the nurse has discredited herself and she is not a competent witness—she has certified to a movement which was not made, the patient did not carry his hand to his head, because the nervous connection between the volitional center and the muscles of the left forearm was broken. The diagnosis is not difficult to arrive at. It is a case of endocranial hemorrhage.

Thanks to a host of able investigators who have done so much in cerebral localization, the pathology of this case can be determined by a study of the symptoms. The mariner's compass points to the north with no more certainty than motor paralysis of the left forearm and hand point to that portion of the cortical surface of the right hemisphere near the longitudinal sinus, along the fissure of Rolando. The lesion is hemorrhagic, for it developed some minutes after the head was struck; it involves the cortex, because it causes convulsions as well as paralysis; it is in the upper and middle Rolandic regions. A blood clot formed

anterior to the optic commissure and pressed upon the outer side of the right optic nerve, causing loss of sight in the left half of the right eye. This pressure has been removed by absorption, as is evidenced by the present condition of the right eye.

The treatment of the case has been much too conservative. The splendid results of surgical work in meningeal hemorrhage during the last ten years have taught the advisability of prompt action in these cases.

The skull should have been trephined and an effort made to remove the clot. Such a course was offered to the patient, but he rejected it, preferring rather to depend on nature's efforts to repair the damage. Those physicians who thought he was not seriously injured and believed he was malingering thought they saw in his refusal to be operated on evidence of the fact that the patient was playing a part and that he knew an operation was not needed.

DISCUSSION.

Dr. H. G. Brainerd, Los Angeles—This paper is particularly difficult to discuss, but it seems to me that the doctor's diagnosis does not cover all the points. How to explain a left hemiplegia from a cerebral lesion which produces motor paralysis is difficult to explain. It would seem that there was a great mixture of organic lesion with hysterical symptoms. I do not know any anatomical or physiological means of producing a left anesthesia and degeneration of muscles of the left side in the manner suggested.

Dr. MacBride, Pasadena—There is one characteristic thing in these cases of dural hemorrhage; that is, rather irregular distribution of the paralysis. The dura is supplied by the anterior and middle meningeal arteries. A lesion of the dura to produce convulsions must involve the inner surface of the dura. Sometimes we have these irregular dural convulsions caused by spicula of bone; sometimes by external hemorrhage, but, of course, pressure on the cord producing irregular convulsions must be considered in order to do this. As a rule dural convulsions are due to subdural hemorrhage. There is only one lesion that can do this. That is subdural hemorrhage by spicula of bone. There must have been some injury at the base of the brain. There have been a few cases reported in which with very minute cortical lesions independent of traumatism there has been marked atrophy on the opposite side. The treatment was too conservative. I think brain surgery has shown brilliant results. The operations for tumors, abscesses, or cysts have not shown the brilliant results that trephining has. Dr. Starr in New York showed me a patient who had a hemorrhage on the left side with complete paralysis. He had subdural hemorrhage. Operated on about three weeks after and took out a large clot and the patient completely recovered. If this man were let alone he might have recovered, but ultimately when the clot had absorbed and the cicatrix contracted, he might have had paralysis. The atrophy on the left side would probably indicate some lesion on the left side and the same thing might produce the anesthesia.

Dr. William Franklin Barbat, secretary of the San Francisco County Medical Society, was married on January 23d to Miss Emilie M. Kane.

GRAWITZ TUMOR OF KIDNEY.*

By E. O. JELLINEK, M. D. (Vienna), Chief Physician Medical Department, German Hospital, San Francisco.

IF I take the liberty to report to you two cases of *strumae lipomatodes aberratae renis*, or Grawitz's tumors, I do so because these tumors are little known to the practicing physician in spite of their frequent occurrence, and also because they are of great importance for therapeutics and prognosis. Without desiring to enter upon the controversies which in 1883 followed Grawitz's publication concerning the source or origin of these tumors, since it would be too digressive from our subject, I should like to present to you briefly the theory which at present has been accepted almost universally.

These tumors, of the size of a pea to that of a cherry, rarely assume larger dimensions; they lie isolated or in large numbers in the medullary substance of the kidney and are always incapsulated. A section shows them to be of a whitish gray color, sometimes reddish-brown from profuse vascularization or hemorrhages in the tissue; they remind us of medullary cancers or sarcomata, especially since they are soft and fragile. In structure they are highly adipose, for which reason formerly they were frequently termed lipomata of the kidney, a kind of tumor which occurs in the kidney, but is extremely rare compared to Grawitz's tumors. They have no fat-cells, but rather fat globules arranged in large polygonal or cubic cells, either in groups or in tubules and surrounded by a delicate homogeneous or fine fibrillary areolar tissue. Numerous blood vessels course in this tissue. The fat can be extracted easily by means of ether or alcohol. The interstitial tissue of these nodules is connected with the interstitial tissue of the medullary substance of the kidney. On the other hand, the cellular groups described above, as well as the tubules, are foundations of their own kind and are separated by a capsule from the medullary substance of the kidney. At the outermost part of this capsule terminate the uriniferous tubules, which are more or less in a state of degeneration. I mention this fact especially for the purpose of emphasizing that these tumors have nothing in common with the genuine renal adenomata which originate from the epithelium of the uriniferous tubules. These nodules abound in lecithin and correspond thereby, as well as by their histological structure, to the suprarenal capsule and those nodose tissues which are found in the suprarenal capsule and are termed *strumae lipomatodes suprarenales*.

Grawitz in a very critical manner showed in the before-mentioned treatise that these renal tumors originate from scattered particles of the suprarenal capsule. In a fetus of two to three months' growth the suprarenal capsule, as the larger organ, surrounds nearly the entire con-

veyity of the kidney, separated from it only by a thin cellular layer—the subsequent renal capsule. Dispersed particles of the suprarenal capsule which, by the way, as small yellow spots frequently form an occasional condition in a post-mortem, may be deposited not only on the renal surface, but can penetrate more or less deeply between two reniculi or lobuli of the kidney, which at this fetal stage of the kidney have not yet coalesced. If subsequently these reniculi press close to one another until they become completely coalesced, these dispersed particles remain deeply embedded in the medullary substance of the kidney. In case these dispersed particles of the suprarenal capsule from some cause or other, unknown to us, begin to proliferate they form that kind of tumor which bears the structure of the suprarenal capsule, termed, briefly, Grawitz's struma of the suprarenal capsule, or hypernephroma renis. In and of themselves these tumors appear to be benign and may be found as an occasional post-mortem appearance without having caused any symptoms during life. On the other hand, by multiplicity and size, they can cause the symptoms of renal tumors, namely, pain, hemorrhage anemia, etc.; finally they can degenerate into carcinomata or saromata, a fact which, for pathology of renal tumors, seems in my opinion to be of the greatest importance and on which I shall dwell more fully in the description of the two cases recently observed by me.

Case I.—On January 16, 1902, I was called to attend Mr. A. D., who complained of violent colicky pain in the right lumbar region, which radiated toward the region of the bladder, the penis and the testicles. By taking his history I learned that the patient claimed to have been in perfect health, except for the last two years, and was able to attend perfectly well to his business, that of a merchant. For five or six years, he says, he felt a slight pain in the right side; still at no time had it been so great as to cause any inconvenience to him; he believes he felt this pain for the first time after a race which he ran and from which he fainted. Two years ago one evening, in a state of the best health, he had a sudden attack of violent pain in the right side. A physician, who was summoned, declared it to be nephritic colic in consequence of renal calculi; he cut short the attack by a subcutaneous injection of morphin. These attacks recurred from time to time, and during them, as well as during the intervals free from pain, blood is said to have been voided with the urine. Also urgent desire to urinate and pain in the bladder existed. During the last two years the patient began to lose weight; his general condition grew so bad that he had to neglect his business more and more. According to the diagnosis, therapy was directed to nephrolithiasis. On examination I found the following: The patient, 43 years old, descended from a healthy family; no lues; of medium size and corresponding bone structure; flabby muscular system; scanty panniculus adiposus; skin and mucous membranes extremely pale, of a slight ictero-cachexic color; strabismus divergent, cranial nerves otherwise normal; no enlargement of the lymphatic glands, no edema; cardiac dimensions normal; above the apex a faint whizzing murmur, which increases in intensity towards the pul-

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monalis (anemic murmur); percussion and auscultation of the left lung normal; on the right the full pulmonic resonance extends anteriorly as far as the upper border of the fifth rib, posteriorly as far as the tenth spinal process; pulmonary borders are easily displaceable during respiration; normal on auscultation. The abdomen is largely convex over the niveau of the thorax; the right half of the epigastrium and the right hypochondrium as far as the umbilical line are decidedly prominent. The entire abdominal wall shows distended collateral veins extending toward the lower thoracic half. On percussion the hepatic dimension begins at the superior border of the fifth rib and extends in the parasternal line as far as about three fingers' breadth above the umbilicus; in the nipple line, as far as the eminence of the umbilicus. On palpation a tumor with a heavy border is felt extending in the parasternal line as far as about three fingers above the umbilicus, thence in a light convex arch downward toward the nipple line as far as the eminence of the umbilicus, from where it descends rather abruptly toward the anterior axillary line as far as the neighborhood of the superior spine. On palpation this steep descending portion appears to be much heavier and arches anteriorly toward the lumbar region so that the impression is created that it is not a case of hepatic tumor, although the respiratory displacement of both parts is the same, and the stomach as well as the intestinal distention do not vary from the normal on percussion as well as on palpation. The right lumbar region toward the spinal column presents diminished resonance.

An Ewald breakfast administered on the following morning to test stomachal digestion was syphoned out after an hour, and on examination gave the following chemical and microscopical results: abundant free hydrochloric acid; no lactic acid; no Oppler-Boas bacilli; presence of sarcine. On percussion the spleen appeared to be enlarged, but could not be palpated. Red blood corpuscles, 3,200,000; leukocytes, 11,000; hemoglobin, 46 per cent.; urine, quantity in twenty-four hours, 1,900 cc.; sp. gr., 1.027. Traces of serum-albumin; no sugar; indican pronounced; no Diazo. On microscopical examination, abundant leukocytes, scanty red blood corpuscles and pavement epithelium; no tube casts. (Not examined for uric acid.) Diagnosis: *Tumor renis dextri et hepatis*.

On January 23rd the patient had another very violent attack of pain which was localized over the entire abdomen and radiated toward the bladder and the glands penis; frequent urgent desire to urinate; voiding of urine painful. The quantity of urine tested had a sp. gr. of 1.028, was of a red brown color and contained several floating particles, some as large as one cm., and of the thickness of tissue paper. At the sight of these I suspected at first echinococcus, but the microscopical examination of the fresh as well as the stained particles revealed no characteristic morphological elements; on the contrary, these particles, as well as others evacuated subsequently, showed only very few isolated cells, the structure of which could not be recognized. After that, and subsequent to the attacks of pain now recurring more frequently, but also during the intervals free from pain, there appeared in the urine coagula presenting detritic ramifications which placed their source and origin from the kidney beyond all doubt.

For diagnosis I was confronted by the following differential diagnostic doubts and difficulties: It could be a case of echinococcus of the liver with perforation of the kidney, for the evacuated particles were evidently very suggestive of this supposition; perhaps less probable, it could be a

case of primary echinococcus of the kidney which had invaded the liver; or a renal tumor of a different kind which had invaded the liver, and with reference to the latter hypothesis I suspected first of all a Grawitz tumor for reasons which I shall state afterwards.

Entirely independent and without knowing that patient was treated by me, Dr. Moffit, whom the patient consulted on my advice, had arrived at the same diagnostic doubts and difficulties, only Dr. Moffit was more inclined to the diagnosis of a Grawitz tumor, while I rather considered it to be echinococcus. Since, in consequence of repeated microscopic examinations of the discharged particles no morphological elements indicating echinococcus had been found by Drs. Moffit, Ophüls or myself, I adopted Dr. Moffit's diagnosis and informed Prof. Czerny in Heidelberg—by whom the patient was to be operated—of our diagnosis as Grawitz tumor.

Patient was operated upon in the beginning of May, and Prof. Czerny was kind enough to inform me in a few lines about the condition and result of the operation. With exceedingly great difficulties and profuse hemorrhage a renal tumor of the size of a man's head was removed. The tumor was firmly coalesced with the inferior surface of the liver and had grown in the form of a cone into the vena cava. Prof. Czerny stated in his report "he hoped to be able to send patient alive to San Francisco, but he could not guarantee for him a long life." The mass proved to be a Grawitz tumor. After convalescence, retarded by venous thrombosis of the right femoral with subsequent sepsis, patient arrived here in October, 1902. At that time I was compelled to diagnose a carcinoma of the tenth and eleventh dorsal segment of the spinal column, of which patient died in a most pitiful condition on January 31, 1903, at the German Hospital. I am sorry to say we were not permitted to make a post-mortem examination.

Case II.—Mr. A. W. was received in the German Hospital on June 6, 1903. Patient is 55 years old, complains of loss of weight, weakness and discharge of blood with the urine. No hereditary trouble, no lues. Patient drinks beer moderately, but smokes a great deal. In childhood and youth he was always in good health; had the measles at the age of twenty-five and mumps at the age of thirty-one, but recovered entirely. Two years ago he suffered from attacks of syncope, which since then have not recurred. About a year ago patient noticed discharge of blood with the urine which continued for a week. A month later the discharge of blood recurred only more profusely. Patient was confined to his bed for three weeks more or less. In December, 1902, hematuria recurred, this time with conditions of irritation of the bladder and pain which radiated toward the penis; he said also that he had chills and fever, as well as sweats for about two weeks. His present attack began on June 1, 1903, without any fever or pain. During the time of the disease, that is to say, during the last year, the patient lost 45 lbs.

Status on June 6, 1903: Man, tall, of vigorous bone structure, muscular system well developed, but flabby; moderate panniculus adiposus; weight, 145 lbs. Skin and mucous membranes pale; no edema. Percussion and auscultation show the heart and lungs normal. Abdomen not prominent, not sensitive to pressure; dullness of liver at the upper border of the sixth rib; lower border at the costal arch; liver just palpable and not sensitive to pressure. Dullness of spleen normal, but not palpable. In the right lumbar region a tumor can be palpated which conveys the impression of a right lateral floating kidney. This tumor extends in the anterior axillary line as far as about four fingers' breadth below the costal arch and is displaceable on respiration. There is dullness posteriorly in the right renal region as far as the spinal column; compared to the left side the dullness of the right kidney is about twice as great or even more. The surface of the tumor appears to be smooth, and is sensitive, but not painful when palpated. Urine sp. gr., 1.020, of neutral reaction. Color of urine is reddish, largely mixed with blood. The precipitate presents clot-like detritic ramified coagula, which remind one of the detrital tissues of bronchitis fibrinosa. Traces of albumin; no sugar; no Diazo. On microscopical examination, abundant red blood corpuscles; isolated leukocytes; no tube casts.

Diagnosis: tumor renis, probably Grawitz. Cystoscopic examination, catheterization of ureters made by Dr. Krotoszyner after subcutaneous injection of phloridzin, and kryoscopy gave the following results:

Right kidney, kryoscopy, 1.3; phloridzin, 0.25%, sugar; on microscopical examination, red blood corpuscles en masse; leukocytes; round epithelium.

Left kidney, kryoscopy, 1.2; phloridzin, 1.28% sugar; by microscopical examination, numerous red blood corpuscles and pus. (The urine of the left kidney was caught from the bladder, while the catheter remained in situ in the right ureter.) Kryoscopy of the blood, 0.48; normal, 0.56. At the end of our examinations, and having ascertained that the left kidney in all probability was performing well its function, I requested Dr. Weil to extirpate the kidney, which operation was made on June 22, 1903.

Incision parallel to twelfth rib. After separating perirenal fat it is found that the kidney is of more than double its normal size. Capsule extensively adherent; the adhesions separated under considerable oozing. Kidney extends high up under the ribs and can be luxated only after dissection of twelfth rib. The tumor extends towards the hilus. Ligature of vessels and ureter. Cavity loosely packed with gauze; wound closed about two-thirds; healing rapidly by granulation.

Patient voided during the first twelve hours after the operation about 400 cc. of urine, which did not essentially differ from that before described. Isolated blood corpuscles can be found in the urine to the present day, and I am in doubt whether they originate from the left kidney, or, as seems more probable, whether a cone of the tumor—as you will see in the preparation—projects into the pelvis of the kidney and has penetrated the right ureter, a fact which would essentially aggravate the prognosis. Otherwise patient had an undisturbed convalescence; his weight until September 8th has increased about 16 lbs.; he takes frequent walks.

After the description of the two cases, in which the diagnosis of a renal tumor was out of the question, I feel it is my duty to state to you the reasons which induce me to make the probable diagnosis of a Grawitz tumor. I also should like

to discuss the question whether the diagnosis of a Grawitz tumor without an explorative incision can be made in any case with some probability.

(To be continued.)

THE NECESSITY FOR THE SYSTEMATIC ANNUAL EXAMINATION OF SCHOOL CHILDREN'S EYES, EARS, NOSES AND THROATS BY SCHOOL TEACHERS. INCLUDING A REPLY TO PROFESSOR LESLIE'S LEAFLET.

By FRANK ALLPORT, M. D., Chicago, Ill., Prof. Clinical Ophthalmology and Otology, Northwestern University Medical School, Etc., Etc.

NASMUCH as some of the local and State Boards of Health and Education on the Pacific slope are about to take decisive action on the annual and systematic examination of school children's eyes, ears, etc., by school teachers, I have been requested by some members of the California profession to say something on the subject for the CALIFORNIA STATE JOURNAL OF MEDICINE that will set forth the needs for the work and the best and most practical method for its accomplishment. This, then, must be my excuse for reappearing in print once more in connection with a subject upon which I have written so much.

Since writing this paper my attention has been called to an article appearing in the CALIFORNIA STATE JOURNAL OF MEDICINE for December, 1903, and January, 1904. It is written by Professor George L. Leslie of the Los Angeles High School, and was designed as a "leaflet" to be distributed amongst the teachers of Los Angeles. I am delighted that a man as erudite and eminent as Prof. Leslie has become sufficiently interested in these tests to become an active worker in the cause. I fear, however, that his leaflet, while doubtless simple enough to himself, is so ultra-scientific, complex and profound, as to be absolutely incomprehensible to the average teacher, and that discouragement will follow its perusal, together with a virtual abandonment of the tests. I have spent more time in *simplifying* my plan of examination, together with instructions to teachers, than I ever did in their original construction, and yet teachers complain of the scheme as too complicated, until its utter simplicity has received a demonstration. My imagination fails to conceive of their feelings when Prof. Leslie's leaflet is submitted for their inspection. I believe that much of the matter in the leaflet would require careful study by the average oculist to insure its entire comprehension. I therefore feel that it must be beyond the grasp of people who have not received a careful medical education. I am satisfied from a somewhat extensive experience in

such matters that the role assigned to teachers by Prof. Leslie in his leaflet is altogether too arduous and extensive, and when it comes to testing for muscular imbalance and diagnosing refractive and other errors, the matter simply becomes utterly impracticable and impossible, because teachers cannot and will not do it. My advice, therefore, is to submit to teachers a plan of examination that is perfectly plain and simple and yet efficient, and one that involves but little time and labor, believing that this is the only plan through which real utility may be expected. I beg leave to mention also that in Prof. Leslie's leaflet no mention is made of ear, nose or throat defects, an omission which would be most unfortunate for the entire success of the scheme. I wish again to express my delight at the interest in the matter evidenced by Prof. Leslie, and I sincerely trust that more educators may follow his leading in agitating this most important subject. My only criticism of his article is that his ideas go too far, and set a standard so high as to be beyond the reach of the average teacher.

Dr. Allport's Paper, Referred to Above.

There are in the United States over fifteen million school children, ten million of whom are suffering from some eye, ear, nose or throat defect, which if relieved will place them in a much better condition to undergo life's struggles, and to achieve a measurable degree of that success which produces self-respecting citizenship, and relieves the state, county or town of burdensome pauperism. No flight of fancy is required to transform the defective child into the non-supporting "ne'er do well," the wandering and menacing tramp, or the idle, pleasure seeking, and misery-finding prostitute. The evolution is natural and consequential, and stands as an enduring monument to the benignity of education. A child whose educational progress is embarrassed or almost stopped by reason of physical defects may soon acquire a loathing for education and all that education represents, and the seeds of idleness and irresponsibility thus being sown may, unless energetically and tactfully controlled, either by parental or surrounding influences, fructify and produce a personality ripe for sinister inoculation. If, therefore, the State can eliminate, control or mitigate the existence of such physical defects in children, and by its parental supervision place such children in a position of reasonable equality with their healthy companions, thus affording them fair opportunities for educational progress, its duties become unmistakably clear, and its investment of public funds for the consummation of such designs, a laudable measure of unquestionable economics. If the direct causes of criminality and pauperism could be accurately ascertained, I will venture the opinion that the prevailing etiological factors would be physical defectiveness and social surroundings. If, therefore, either of these can be even materially mitigated, a distinct impression would be made upon the criminal and pauper annals, and the problem would become one to be worthily considered by the economist, philanthropist and sociologist. The improving of either physical defects or social surroundings in *adult* life, is a problem of almost hopeless perplexity, while if these foes to social prosperity be attacked in the budding periods of hu-

man existence, the difficulties are immeasurably mitigated.

Concerning the last of these mundane misfortunes, or the social surroundings of individuals, this paper will have nothing to say, but as a medical man I am intensely interested in the second proposition referring to physical defectiveness, and I sincerely believe that if the relievable bodily abnormalities of children could be eliminated, a mighty factor encouraging idleness, poverty, and crime, to say nothing of human suffering, would be driven forcefully to obscurity.

"Prevention is better than cure" is an old adage, and is nowhere more truthfully exemplified than in the subject under consideration. The adage might be somewhat altered to read, "Prevention is possible a thousand times, while cure is possible but once," and still not stray very far from the truth. So true is this that almost all great reform and philanthropical movements tending toward the physical, mental, moral and sociological uplift of humanity, are surely and inevitably endeavoring to grapple with the subject in the earliest years of childhood, before the withering and decadent breath of human degeneration has rendered upward and improving conditions well nigh impossible.

Perhaps nothing more surely indicates the nobility and unselfishness of the medical profession than its recognition of these principles, and its beneficent work in the direction of preventive hygiene and medicine. Its best efforts are directed toward the elimination of disease, thus presenting the only instance in professional or commercial life where strenuous endeavors are made to destroy one's own income. While it would be most interesting and instructive to dwell upon the various bodily infirmities of children that militate against their intellectual, moral and sociological advancement, the space allotted for this paper is all too short to permit of such a digression. The title of my paper indicates that I am to write upon those ocular and aural defects which deter or prevent the afflicted child from acquiring those educational advantages which properly equip him for the great battle of life, the struggle for existence.

Come with me to the clinic and see a poor child of perhaps some foreign extraction. Notice its attenuated form, its pinched countenance, its bloodless, illy-nourished appearance, its unintelligent, unresponsive aspect, all indicating insufficient nutrition before and after birth, and general lack of proper food, air, care and hygiene during the brief span of its miserable existence. Examine its eyes with your find myopia or hypermetropia of enormous degrees, test-types and ophthalmoscope, and you will perhaps or a congenital cataract, either doubtless due to pre- and post-natal starvation, and general neglect. Place this child in a school where physical defects are unrecognized, and watch the results. He is unable to see distinctly, and headaches, pain and general discomfort follow all his efforts to study. He cannot see the blackboards and charts; printed books are indistinct or seen with much effort; the faces of his teacher and comrades are blurred; he does not know what is the matter, but he finds it impossible to keep pace with his fellows, and he acquires a hatred for school; his endeavor to acquire an education becomes abortive, he falls behind his class, becomes discouraged and truant, and finally gives up the effort, joins the ranks of street gamins, develops criminal tendencies, is sent to a reformatory that does not reform, and may easily end his life in the penitentiary or on the gallows.

Pass from this defrauded child to another of similar miserable appearance, but with an unusually stupid countenance produced from enlarged tonsils

or adenoid tumors in the throat, which prevent proper nasal breathing, and cause him to keep his mouth open in order to breathe. Eventually he becomes deaf through obstructive and catarrhal influences or on account of chronic middle ear suppuration, which is an actual and constant menace to his life. His general open-mouthed, unintelligent countenance, coupled with his deafness, lead him to be considered stupid, if not idiotic, an impression which is daily strengthened by his poor educational progress, impossible to overcome, through his unfortunate physical infirmities. Eventually he, likewise, neglects his studies, hates his school, becomes a street habitue, idle and dissipated, and may easily terminate his existence amid crime and its consequences. These are no fancy pictures which I have painted in lurid hues for the delectation of the reader to point the moral of my theme. They are true, living, breathing, pulsating facts that must be familiar to every student of hygiene, criminology or sociology. If education is worth anything in the broadest sense, and if it passes beyond the borders of dilettanteism, into the broad realms of those influences which stand for human uplift, then it should reach down, down to the very dregs and bottom of the social scale, and pull up the *most* unfortunate of the human race, and place them on a par with their fellow-men. We all know that education *will* perform this great evolutionary process, and I claim that it is the inalienable, inborn right of every citizen of this great, magnificent republic to be placed in a position where an education may be acquired. I also claim that inasmuch as we must look to education to solve many of the criminological and sociological problems of the day, and that the more knowledge is diffused throughout the length and breadth of this land the happier and better will the land become; that it is the distinct, moral and economic duty of the State to see that educational advantages are afforded wherever such conditions are in any wise possible. I further believe that wherever obstructions exist, blocking the way toward educational acquirements, they should, as far as possible, be dissipated by those guardians of the public welfare having such matters in charge. I believe that public school officials should maintain a strict surveillance over the physical as well as over the intellectual and moral welfare of those children committed to their charge. A large portion of a child's life is spent in school, and teachers should, and I believe do, take a sincere and watchful interest in the bodily condition of their pupils. The necessity of such observation is the more accentuated, because a large proportion of these children come from homes of ignorance, filth and vice, where mothers and fathers apparently care but little for their offspring, and evidently desire to shirk all possible moral responsibility. Under such circumstances the burden should fall upon the shoulders of the State authorities, both medical and educational, whose best endeavors should be taxed in vicariously officiating as both father and mother to see those poor unfortunates whose earthly advent has been signalized by distress from birth to older years.

While it is not my intention to unduly magnify or exaggerate the importance of any particular physical defect, and its baneful influence in hindering educational acquirements, I believe it safe and conservative to declare that aside from mental capacity, nothing is so essential to intellectual progress as sight and hearing, and of these the former must claim the principal position.

It is, therefore, to these two functions of special sense that particular reference will be made in this paper, and while I will not burden the reader with a large and formidable array of statistical truths that

are now so well understood as to render recapitulation unnecessary, I will trespass upon the readers' time and patience for a brief space in order to clarify in their minds, and in the minds of others, the history and motives for the tests, a detailed description of which will be given toward the close of this article.

The examination of school children's eyes by regularly appointed ophthalmologists is no novelty. It has been done many times by numerous workers, and conspicuously by Cohn of Germany, and Risley of Philadelphia. The plan of ocular inspection by ophthalmologists, however, while ideal in theory, possesses the disadvantages of the great and unnecessary expenditure of public funds, and the inevitable production of much professional friction. Concerning the first objection: It must be apparent that competent medical men could hardly devote such large amounts of time to annual investigations of this nature, which would practically consume the time of several men in large cities, without at least some compensation, which would necessarily add materially to the school budget; and certainly incompetent men would be undesirable. Relating to the second objection bearing upon the production of professional disturbances and friction: Should one or several ophthalmologists be selected to personally examine all the public school children in a given city, it can only be said that such conditions would be but natural and human. The power thus placed in the hands of one man, or several men, would be enormous, and the opportunities for personal aggrandizement and gain, professionally and financially, so great that but few men could successfully withstand the temptation. It seems unnecessary to dwell at length upon this point, but to physicians who understand such matters throughout their devious and diverging pathways, the objections to the plan of personal inspection of all scholars by practicing physicians seems almost insurmountable. I, therefore, February 6th, 1895, in a paper read before the Minnesota Academy of Medicine, proposed a plan for the annual systematic examination of school children's eyes by *school teachers*, which was shortly after placed in operation in the public schools in Minneapolis, St. Paul and other Minnesota cities. December 30th, 1897, I read a paper before the Associated Minnesota School Boards in St. Paul, in which I proposed not only that the eyes of school children should be annually examined by school teachers, but that the ear, nose and throat should be also examined through the agency of a few simple, pointed and pregnant questions and observations. This paper was supplemented by another which I read April 9th, 1898, before the Chicago Teachers' Club, in which I introduced a new testing card, combining in convenient form not only the Snellen test letter, but also minute and explicit directions to teachers, as to how the tests may be made. The salient features of the test are that they shall be systematically performed each fall by school teachers. I say "systematically" performed because they should be made as regularly as any other school function, as otherwise their efficacy is almost lost. Many teachers imagine themselves to be enacting their complete duty when they maintain a general supervision over their pupils' ocular and aural conditions, observe palpable defects and occasionally refer their pupils to certain medical advisers. This is good as far as it goes, but it is totally inadequate as a substitute for carefully arranged questions that, when answered, will disclose the existence of 90 per cent. of serious eye, ear, nose and throat diseases. The occasional superficial and unsystematic observation of pupils' eyes and ears cannot be safely substituted for thorough, stereotyped tests that have been thought-

fully and intelligently framed for the detection of disease; and yet many ignorant but well-meaning teachers feel that comprehensive annual tests are entirely unnecessary, forgetting the fact that while conspicuous departures from health may be evident to a casual observer, many serious but hidden conditions are only detected by minute and careful examinations. Besides this, unless the tests are distinctly expected from each teacher, many children will escape thoughtful observation of even the most limited character, for while most teachers take a deep interest in their scholars, and conscientiously endeavor to promote their interests in every way, intellectually, morally and physically, still teachers are frequently seen who regard their profession lightly, and endeavor to get through each day's work with as little personal effort as possible. Under such circumstances it is certainly too much to expect that much time will be given to the investigation of the physical condition of pupils, and the child is, therefore, nearly as much neglected, or subjected to nearly the same degree of lack of intelligent supervision, as can be found in many of the squalid homes of public school children. The tests, therefore, should be uniform and systematic, and should annually include all pupils above the first grade, as it has been found impossible to satisfactorily examine quite young children. Some teachers have the impression that a child needs only one examination, but inasmuch as eye, ear, nose and throat diseases may develop from year to year in previously perfectly healthy children, it is essential that each annual test should include all children above the first grade. The tests should be made early in the fall of the year, and should become an integral part of the regular school curriculum. By making the tests shortly after the opening of the fall term, the physical condition of pupils is early ascertained, and steps can be taken tending toward the correction of any existing abnormalities. Should parents be warned of the presence of physical defects in their children, and fail to act upon such warning, the teacher will have ample opportunity to counsel child and parent concerning the necessity of a medical consultation, which would hardly be possible if the tests are postponed until toward the close of school, in the spring of the year. Besides this, the fall tests will have the advantage of enabling the teacher to co-operate with the physician in the execution of his advice, and to observe the results of treatment in the afflicted children.

Some objections have been raised to the examinations being made by school teachers, some feeling that parents would object, others that teachers are incompetent, and still others that it is an unjust tax upon the time and energy of the teachers. Concerning the first of these objections: Its triviality is almost sufficient for its dismissal, and it need only be said that the tests are absolutely harmless and painless, that no instruments or appliances are used, and that the child is practically not even touched during the examinations. Should any child or parent object, however, acquiescence to their wishes should be observed, as compulsion is undesirable, and clashing with parental authority should always, if possible, be avoided. Concerning the incompetency of teachers: I have only to say that any one who is competent to be a teacher can make the tests with perfect ease. They are absolutely simple and uncomplicated, consisting of such questions as, "Does the pupil habitually suffer from inflamed lids or eyes?" "Is the pupil probably 'cross-eyed'?" "Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen's Test Types with either eye?" "Does matter (pus) or a foul odor proceed from either ear?" "Does the pupil fail to hear an ordinary voice at

twenty feet in a quiet room?" etc., etc. The ascertaining of simple facts of this nature does not require a medical education, and can be easily compassed by any one of ordinary intelligence and tact, and strange as it may appear, correct replies to the questions specified in the examination instructions will disclose the existence of at least 90 per cent. of serious eye, ear, nose and throat diseases. For instance, the question, "Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen's Test Types, with either eye?" will disclose the existence of myopia, and many cases of hypermetropia and astigmatism. It will also detect cataract, corneal opacities, optic neuritis and atrophy, many diseases of the vitreous, retina and choroid, etc., etc. The question, "Does the pupil habitually suffer from inflamed lids or eyes?" will detect inflammatory diseases of the cornea, conjunctiva, lids, sclera, iris, etc., etc. The question, "Does the pupil fail to hear an ordinary voice at twenty feet in a quiet room?" detects all forms of deafness, whether due to ear-wax, catarrh, labyrinthine, or middle ear disease, etc. The question, "Is the pupil an habitual mouth-breather?" discloses turbinated and septum diseases, polypi, adenoids, enlarged tonsils, etc.

It will, therefore, be seen that notwithstanding the extreme simplicity of the questions, they are most comprehensive in their character, and are capable of detecting a vast majority of serious eye, ear, nose and throat diseases, and while the teacher cannot and should not attempt to make a diagnosis of the pupil's malady, he will at least know that something is wrong, and this is quite sufficient; the physician consulted will do the rest. In case some abnormal condition is disclosed by the tests, the teacher sends the parent a card of warning, stating that some disease is believed to exist, which is not only unfortunate for the child, but will retard the progress of education, and advising the parent to consult the family physician or some specialist, either at the office or free dispensary. It will thus be seen that there is absolutely no reason why an intelligent teacher should feel at all incompetent to make these tests, and it is earnestly hoped that this objection will be now relegated to obscurity.

(To be continued.)

AN UNFORTUNATE ERROR CORRECTED.

Through an error in transcribing, Dr. R. M. Bonar, of Santa Rosa, a graduate of the Ohio Medical University, Columbus, Ohio, is indicated in the new Register as a graduate of the Ohio Medical College, an eclectic institution. The JOURNAL is advised that this has caused some trouble, and therefore takes pleasure in printing Dr. Bonar's letter; the statements made by him are found to be quite correct.—Ed.

To the Editor of the State Journal.—Owing to a typographical error in the recent register I am being caused considerable annoyance. The data furnished you gave my school of graduation as Ohio Medical University; it appears in the register as Ohio Medical College, which is an eclectic school.

I have joined the County Society here as a regular, which I am, but the members have taken exception to my doing so. I have explained to them that it's only an error in the types, but do not wish my vindication to rest on my word alone, and I request you write a letter to the Secretary of the Sonoma County Medical Society confirming the above, if you find it to be true, and also an item in the next issue of the JOURNAL, noting the correction would only be in justice to me. Very truly,
R. M. BONAR.

DR. PHILIP MILLS JONES has been appointed the representative of California on the Auxiliary Legislative Committee of the A. M. A. to meet in Washington, D. C., Feb. 11.

VASECTOMY.*

AN ARGUMENT FOR ITS THERAPEUTIC USE IN CERTAIN MENTAL DISEASES AND AS A MEANS OF DIMINISHING CRIME AND THE NUMBER OF CRIMINALS.

By C. N. ELLINWOOD, M. D., San Francisco.

AMONG the many criminologists not a few of the most erudite, humane and progressive have advocated castration as an efficient and justifiable treatment for the insane and those of the criminal class who are given to persistent, violent and homicidal tendencies. The reasons generally adopted in advocacy of this important measure of human progress are:

1. The benefit or improvement in the mental condition of the afflicted individual; and,
2. The protection it affords to his fellows from violence and the jeopardy of life; and,
3. The important protection it affords to mankind against the transmission by heredity of morbid and vicious elements of organization and tendencies which add so much to the world's misery and human disgrace.

My purpose in asking the attention of this Society of medical practitioners is to submit the question of a possibility of adopting the therapeutic procedure of vasectomy for the relief of a class of sufferers (imbeciles, maniacs and criminals), who, by heredity or environment, have acquired morbid sexual perversion of a chronic and dangerous kind. We see a few of them in our private practice and many of them in our eleemosynary and reformatory institutions. Some of the most horrible crimes of history have been committed by sexual perverts, in that state of maniacal eroticism or mental disease which abolishes reason and leaves only a bestial fury of insane impulses, to kill and mutilate their victims.

Many years ago a man came to me in great mental anguish, asking my services as a surgeon to castrate him. After patiently listening to his pitiable history. I sent him off with a diagnosis of insanity and referred him to specialists in that department of medicine. The following year he returned with the same request, yet more urgently expressed and in a more deplorable mental state, full of cogent reasons for the operation being performed. He felt at times, under excitement, violent impulses, which he feared would get beyond his control—an impending mania to kill and destroy, utterly repulsive and frightful to himself as he afterwards remembered them; a dangerous man in the community in which he lived. A year later he returned to me the third time, more determined and more insane and irresponsible than ever. The established teaching and practice of the profession, as well as public sentiment, denied this unfortunate the relief which he sought in castration and

which seemed reasonable enough; but only the asylum was left to him as a refuge.

Since that day we have learned something of vasectomy by many reported experiences, and while it is as efficient as castration in subduing sexual perversion and maniacal tendencies in the erotic subject, it is free from many of the objections which are usually advanced to the excision of the testes. The retention of the glands and some of their physiological functions is advantageous to the general health, personal ambition and social enjoyment. Vasectomy, in short, judging from recent experiences, is shown to be free from the dreaded after effects, mental depression and hypochondria which in the past (perhaps erroneously) were attributed to excision of the testes. The operation is less repulsive to the patient, is absolutely free from danger and leaves no mutilation nor visible scars, and within my observation but little atrophy of the testes.

In conclusion, I beg to report briefly the following case:

A boy at the age of puberty developed signs of mental disturbances, self-prostitution, violent temper, and maniacal tendencies under sexual excitement. Inability to learn in school, rebellious and refractory at home, and after several attempts to violently assault his sisters, he was placed in a reformatory institution, where he was restrained and disciplined for several years without marked change in his condition. About two years ago he submitted to vasectomy as a rational therapeutic measure, with the most satisfactory result. His mother reports to me that his mental faculties show great improvement, with ability for application and continuous concentration; entire relief from maniacal attacks of rage and destructiveness. His general health is good; he is quite industrious, ambitious to work and happy in following his trade, which he is mastering with fair progress.

Comparing his present condition with the pitiable and hopeless state he has been in for years prior to the operation, amply justifies the procedure, and encourages its adoption as a rule of practice in such cases. The patient himself realizes the benefit he has derived and warmly expresses his gratitude.

The practical results of vasectomy in this class of cases, have yet to be shown by a multitude of cases and an accumulation of observations, but enough has been shown to commend it to the attention of the profession, and especially to the medical staffs of public institutions where such unfortunate patients most do congregate.

DISCUSSION.

Dr. J. Rosenstirn, San Francisco—It is hard to judge from the one case reported by Dr. Ellinwood, whether such interference will always have such a most satisfactory result. We accept, perhaps, that there is an internal secretion from the organs of generation that has an irritant influence on the nervous system, and thereby produces these changes in character and mentality, as Dr. Ellinwood has described. I could see my way clear to the efficacy of that interference, but where there are anatomical lesions, anatomical changes in the central nervous system, I do not see exactly how vasectomy can change the character or disposition and the degeneracy of the patient. I believe Dr. Ellinwood

* Read at the thirty-third annual meeting of the State Society, Santa Barbara, April 21-23, 1903.

has to be congratulated upon the result of this singular and single case. Whether it can be recommended and accepted in cases of that kind, the future perhaps will detail. It is a most interesting case, and the result is excellent.

Dr. J. H. McBride, Pasadena—I think Dr. Ellinwood's position is one which ought to be considered entirely free from prejudice. Although I have found in talking with others that it is very difficult to consider. There are some facts that guide us somewhat in the value of this operation. Some years ago a man in Chicago was arrested for assaulting women on the street. This man recognized the fact that his passions were beyond his control and asked the physician to perform an operation. It did not affect him at all. He was the same after it as before. The operation destroyed the power of apperception, and after he had recovered from the effects of the operation and recognized this fact, he threatened to shoot the surgeon. I believe it is a fact, however, that the operation of ovariectomy has shown that the sexual desire is not destroyed in a large number of cases. It is well for us to consider that in this operation the power of apperception is destroyed, but it does not necessarily follow that the patient's passions are destroyed. If we do succeed in one point, we fail in the other.

Dr. R. L. Doig, San Diego—I had a case of this kind. A boy with the same disposition that these patients generally have, although as far as I know he had never attempted assault. The first I knew of him he was found after having castrated himself. He told me that he did it because he had been in the habit of self-abuse, and also that he was afraid of doing some damage. The boy was not particularly bright, but a thorough scholar and rather retiring in his habits. I saw the boy some eight years afterward and the depressing effect had not taken place. He was much better disposition and promised to be, while still retiring, more jovial and a better boy.

Dr. W. T. Lucas, Santa Maria—A few years ago a young man came to me requesting me to castrate him. He was a total stranger to me. I talked with him and he said he had been to see other doctors and they advised him to be castrated, which was false. He suffered from spinal irritation. Of course he was a masturbator and had been reading advertisements until they had worked on his mind. He suffered from the spinal condition also. I put him on a treatment and tried to get a moral influence over him, but could not eradicate that idea from his mind that the only cure or salvation was castration. He went to another physician and told him that I had said he ought to be castrated and the doctor castrated him. I was called afterward on account of hemorrhage and he made a nice recovery from the castration with the relief of the spinal condition to a certain extent, and I think became of a great deal better disposition. I had a very serious time with him afterwards. He had not received the relief he wanted and threatened to kill the doctor, and I think he would have if the doctor had not left the town.

Dr. O. P. Paulding, Santa Maria—These are very interesting cases. I saw this case just reported myself. He came to me and I told him it would be necessary to operate on him, to do as he wanted. I afterwards heard that he had got this other doctor. He did have a most violent temperament afterwards and desired to kill the doctor and even to kill himself. Another man told me that he had bought strichnine and intended to kill himself. He had an uncle who took him east, and he came back a changed boy and is now the brightest young man in the village.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The Alameda County Medical Association held its regular meeting Tuesday evening, January 12th, Dr. O. D. Hamlin in the chair. Forty members were present. Dr. Beckwith read a paper entitled "The Pathology and Treatment of Lobar Pneumonia."

The doctor reviewed the pathology of pneumonia, taking up the various stages of the disease in detail and stating that autopsies show that the majority of fatal cases die during the transition stage between red and gray hepatization. He called attention to the appalling death rate of pneumonia at the present time, quoting statistics showing that it caused about 10 per cent. of all deaths. Under prognosis he emphasized the importance of the difference in virulence of the pneumococcus and thought that toxemia was the most common cause of death. Prophylaxis is not considered enough by the medical profession in general, and proper isolation of the patient and care of the sputum not carried out. He cited a case in which a young lady had contracted pneumonia by kissing her dying mother. The various methods of treatment were taken up, the doctor saying that, after all, while we may hold to one or another specific in which we may have confidence, yet the treatment of the symptoms as they arise forms the most important part in the successful handling of the disease. He thought that the best treatment today was with suprarenal extract. For the past two years he had used this drug with marked success. It should be given from the outset in doses of from one to six grains every two hours. The best results were obtained in children and those past middle age. The course of the disease under the exhibition of the drug has almost always been shortened, the crisis usually occurring about the end of the third day. In some cases, however, especially in adults, the drug had no influence. In conjunction with the administration of the extract, the usual treatment for the disease was carried out, including sponging, strychnia, digitalis and whisky as indicated. Epinephrin hydrate seemed to be negative in its effect, and a change to the suprarenal extract has rendered positive results. The mode of action of the drug is rather problematical. It seems, however, to increase the number of leukocytes in the blood and to have the power of destroying toxic substances, either directly or by stimulating the system to manufacture antitoxin.

DISCUSSION.

Dr. Buteau thought that the indication in treating pneumonia was to use any measures, either in the shape of food or medication, which would tend to increase the number of leukocytes in the blood, as they seemed to play such an important part in the battle between the system and the pneumococcal poison.

Dr. Krone emphasized the importance of training the patient to exert a mental effort towards regulating the character of his own respirations, claiming that in this way it was possible to decrease the rate of respirations.

Dr. Crosby—I find that in the cases that I have treated with suprarenal extract that if I did not get a favorable action in three days I did not get it at all. In full doses the drug sometimes causes a rapid and irregular heart action and has to be stopped.

Dr. McCleave spoke of the use of ice to relieve pain and nervousness and to reduce fever. He thought that he obtained favorable action from the use of creosote carbonate given for its antitoxic effect.

Dr. Stratton—I think it possible to abort pneumonia in some instances, the necessities being a sthenic

patient, an early diagnosis and a prompt institution of treatment. The indication is to bring the blood to the surface, and I use the diuretics and diaphoretics, such as liq. ammon. acetalis, dover's powder with quinine, or even the muriate of pilocarpin hypodermatically.

Dr. Clark stated that he had had a much lower mortality in pneumonia of the aged at the county hospital during the past year since using suprarenal extract, than previously.

Dr. Pratt reviewed the various methods of treatment of this disease that he had seen lauded during the past forty years, and concluded by saying that there was no such thing as treating pneumonia by any one drug, but that the middle course was productive of the best result.

During executive session the following officers were elected to serve for the ensuing year: President, Dr. Jeremiah Maher; first vice president, Dr. E. N. Ewer; second vice-president, Dr. J. M. Shannon; secretary, Dr. A. H. Pratt; treasurer, Dr. Chas. Dukes; Board of Censors—Drs. L. P. Adams, C. H. Miller and Dudley Smith. Delegates to the State convention—Drs. C. R. Krone, H. G. Thomas, A. H. Pratt, J. L. Milton and O. D. Hamlin.

The following were elected to membership in the society: Dr. Lillian Shields, Dr. Anna Williams, Dr. J. B. Wood, Dr. W. L. Dunn, Dr. Carolyne Cole.

A. H. PRATT, Secretary.

The California Academy of Medicine.

The California Academy of Medicine met in regular session January 26th, the president, Dr. Huntington, in the chair. Dr. Emmet Rixford presented a case of spasmodic torticollis; a case of result after extensive carcinoma of the neck; a case of Marjolin's ulcer. The particular interest in the carcinoma case was in the fact that the growth, which had been originally very considerable, was greatly reduced in size and almost disappeared after an attack of erysipelas. Dr. T. W. Huntington presented a patient upon whom he had operated. The child had suffered from osteomyelitis and most of the left tibia had been destroyed. Transplantation of the fibula had been performed and the boy now had a fairly useful leg, though as yet bony union at the lower end had not taken place. He also exhibited a specimen of gall bladder containing a stone which completely filled the viscus. The gall bladder with its contents had been removed together. Dr. Harry M. Sherman exhibited a specimen of paraffin which he had, with some difficulty, removed from the bladder of a young man. The patient had had congenital stricture resulting in a peculiar, and to him distressing, variety of stream when urinating, and he had thought to dilate the stricture by means of a home made paraffin bougie. The result was quite what might have been expected. Dr. Chas. M. Cooper exhibited a specimen of aneurism of the aorta with a well organized clot which practically cured the aneurism. Had there not been pressure on the vagus and suppuration, the patient would doubtless have lived for a long time. He also demonstrated the German apparatus for producing large quantities of ultra violet rays from the high frequency apparatus by means of short spark gaps. All of the papers and cases were discussed. The chair appointed the standing committees for the year and several names were presented for membership.

Mendocino County.

The annual meeting of the Medical Society of Mendocino County met January 16th, at the office of

Dr. Lathrop in Ukiah. Owing to the inclement weather and great distance at which some of the members live, the attendance was small.

On motion of Dr. Moore it was decided to postpone the election of officers and delegates to the coming meeting of the State Society to an adjourned meeting to be held April 2d, when it is hoped to have a better attendance.

The paper of the evening was read by Dr. Poage on "Infant Feeding," and was discussed by all present.

The secretary reported the enrollment of 20 members, including all but six of the regular eligible physicians of the county.

It was decided to give notice in the STATE JOURNAL at an early date of a proposed amendment to the by-laws fixing the date of the annual meeting at a more convenient season, so that more members from a distance may be able to attend, the date to be fixed at the next meeting. C. A. POAGE, Secretary.

Merced County.

The Merced County Medical Society held its regular monthly meeting January 7th. Dr. O'Brien being out of the city, the meeting was held in the office of Dr. Lilley. Present: Drs. Rucker, Smith, De Loss and Lilley.

The paper for the evening was prepared by Dr. W. A. Whitlock and read by Dr. Rucker, as Dr. Whitlock was unavoidably absent. The title of the paper was "Too Much Medicine," the author making the point that the majority of us prescribe far too much medicine, using several drugs where one would do. The reading of the paper was followed by quite a lengthy discussion, led by Dr. Smith taking the ground that the successful man today is he who pays most attention to diagnosis and less to medicine, and that antipyretic drugs did, as a rule, much more harm than good. Dr. Rucker and Dr. De Loss brought out these points more strongly, and stated that the longer they practiced the less medicine they used, relying more on other therapeutic measures for results.

Dr. Smith was invited to read a paper at our February meeting, subject to be selected.

Meeting adjourned to February 4th, at 8 p. m.

W. E. LILLEY, Secretary.

Orange County.

The Orange County Medical Society met in regular session Tuesday evening, January 5th. Owing to the disagreeable weather the attendance was light. Those present, however, had a very interesting meeting.

After the usual routine business, Dr. Gordon reported a case of nephritis following a vaginal hysterectomy, emphasizing the necessity of a thorough analysis of the urine before administering an anesthetic. In this case the urine did not show a trace of albumin with heat and nitric acid, but the same sample after the operation showed about 1 per cent, with Esbach's test.

Dr. Bruner then read the paper of the evening, his subject being "Fractures of the Forearm and Hand." The paper was ably prepared and showed evidence of a thorough knowledge of the subject. In the dressing of a Colles' fracture, Dr. Bruner advocated that used by Dr. Bodine in the Long Island City Hospital, and gave a practical demonstration of its application. H. S. GORDON, Secretary.

San Benito County.

(Organized January 22, 1904.)

A meeting of the physicians of San Benito county was called by the Trustees, through Dr. Philip Mills Jones, for the purpose of organizing a county medical society, on the night of January 22nd. In response to the invitations sent out, Drs. Nash, O'Bannon, O'Donnell, Porter and Tebbetts attended the meeting, and Drs. Ball and Hull sent word that while they could not come, they were heartily in sympathy and wished their names enrolled. Dr. Tebbetts reported that Dr. Flint, of San Juan, a permanent member of the State Society, would join in the county organization, so his name was also enrolled. After explaining the system and purposes of organization, Dr. Jones called the meeting to order and Dr. Tebbetts was elected temporary chairman. The constitution and by-laws recommended by the State Society was then read by Dr. Jones, and on motion the San Benito County Medical Society was organized and the constitution and by-laws adopted as read. On motion it was decided that the society should meet on the first Monday of each month, at 8 p. m., the place of meeting to be determined from month to month. On motion the roster was left open for sixty days in order that all who desired might come in as charter members. (There are but two eligible physicians in the county whose names were not enrolled at this meeting.) Election of officers to serve until December, 1904, was then the next order of business, and this resulted in the choice of Dr. James H. Tebbetts, president; Dr. Richard W. O'Bannon, vice president; Dr. Joseph M. O'Donnell, secretary; Dr. Leonard C. Hull, treasurer, and Drs. Nash, Ball and Porter, censors, for one, two and three years respectively. The election of delegate and alternate was laid over until the March meeting. The annual dues were fixed at \$2.00.

Thus another county society is added to the list, and the year 1904 started well on its way. The Trustees hope that it will see quite as energetic organization as has the past year. The newest society, while it is not large in numbers, is strong in that it represents all but one of the eligible physicians who are in active practice. The feeling of strength in organization is well developed in the new society and there is every evidence that it will live a long and useful life. The Trustees wish it godspeed.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held on the evening of January 12th, President J. Rosenstirn in the chair.

The papers read were on the subject of radio-therapy, and were as follows: "X ray in the Treatment of Epithelioma," by Dr. D. W. Montgomery; "The Finsen Ray," with an exhibition of lamp, by Dr. D. Friedlander; "Radium, with a Demonstration of Its Influence on Plants," by Dr. D. A. Stapler. Dr. Howard Morrow was on the program for a paper on "The Theory, indications and Statistics of the Finsen Ray," but was unable to be present.

DISCUSSION.

(Abstracted from the Stenographer's Notes by Dr. A. B. Grosse.)

Dr. A. B. Grosse—The papers read this evening have been so exhaustive that it is practically impossible to add anything of importance. I would like to congratulate Dr. Montgomery upon his good results with the X-ray, i. e., the non-occurrence of burn or dermatitis; for it is only the fear and the not infrequent occurrence of these symptoms that have and will limit, somewhat, the use of the X-ray, as a routine treatment, in epithelioma. The

superficial epitheliomata are usually slow of growth and, during their early development, only slightly malignant, and have been cured, or eradicated, by various methods: (a) Internal administration of arsenic (Fassar). (b) By freezing with ethyl chloride. (c) By caustic pastes—arsenic and chromic acid. (d) Curettement. (e) Cautery; actual cautery, hot air, paquelin. (f) Excision, which is, by far, the simplest, most universal and, in most cases, the safest method. Disseminated epitheliomata, or carcinomata, should be treated by X-ray only when pronounced inoperable, and in these cases definite improvement, for a longer or shorter period, has occasionally been arrived at; i. e., the case still remains inoperable, but the cachexia disappears and the patient gains in weight. Dr. Montgomery states that this is, at best, a tedious treatment, that for some weeks you can't tell whether you will have any result, disagreeable or otherwise. Hence, the routine treatment by X-ray is to be discouraged, as valuable time may be lost and disagreeable results follow. For certain selected cases, where the knife is objected to, and in locations where cosmetic effect is most desirable, as in corner of eye, etc., it may be considered the method of choice, but only in the hands of those properly qualified. The X-ray has repeatedly caused cancer and Kummel showed a case of xeroderma pigmentosa following exposure to rays. I am, at present, treating a case of X-ray burn, which took place after one exposure of twenty minutes, and after six weeks have not been able to obtain a favorable result. In my comparatively small practice, I have seen quite a number of burns, scars and other disfiguring conditions following the use of the X-ray. As to the Finsen ray, I cannot add anything to the theoretical description, but must take issue with some of the practical deductions. There is no doubt that the Finsen treatment is the treatment of choice in most cases of lupus, but it takes a very long time and is expensive. There is little lupus in the United States and practically none in California; for Dr. Montgomery, in his large experience, has only seen a few cases and I have only seen six cases, in as many years, and these of very slight involvement of tissue. The original Finsen is too expensive an apparatus for the small use that we can put it to here, and for that reason our results, positive or negative, are obtained by the London lupus lamp. This light acts rather well on very superficial lupus foci, but in the deeper or sclerotic conditions seems to fail absolutely. For that reason I prefer, in small lesions, excision, and in those covering large areas the Hollander hot-air method. In lupus erythematosus favorable, as well as unfavorable, results have been obtained. Acne is sometimes very favorably influenced by the Finsen light. In alopecia areata I have had some good results, but this may have been due to chance. The ray is of definite use in certain pruritic conditions. With radium I have no experience, but would like to call attention to its oblique actions demonstrated by certain experimenters.

Dr. Jones—I had the honor to give the first demonstration of X-rays before this society. Some of the statements made by me at that time, and subsequently, were received in a spirit of mirth, yet they have all been accepted long since. I do not believe that the scars resulting should be at all disfiguring if the treatment is properly used. Nor do I believe that an experienced operator will have the misfortune to produce an X-ray dermatitis. In the last two years of my practice but one such untoward result was noted, and that was in the case of a patient who thought he had something which he had not, and who insisted on two or more exposures within a short time. In these rays, as in many other forms, we are dealing merely with radiant energy and the physical problems presented have, most of them, been solved by the physicists long since; they are still being debated in medical societies.

Dr. Carpenter—I will admit that I asked Dr. Jones to make an exposure. I thought I had renal calculus; I subjected myself to two exposures. We placed the tube particularly close to the skin—four or five inches. The interesting thing is this: Four weeks after, when I had forgotten all about my calculus, a very violent dermatitis occurred.

Dr. J. Henry Barbat—I fell heir to Dr. Jones' lupus case, and it might be interesting to note that this patient with lupus has to have a treatment every little while to destroy new foci. A point I wish to make is that the effect of the X-ray is, to a certain extent, only temporary. We must not expect every case of lupus, or epithelioma, which has been completely eradicated, is going to stay cured. I have lately had a case where I cleaned up a large epitheliomatous patch. After the man had been away several months, he came back with a small growth at the external cauthus. This growth has, at present, completely demolished the eyeball and destroyed the orbital plate of the frontal bone. Exposure to the X-ray simply seemed to increase the rapidity of the growth. I advocate the treatment in almost all skin diseases, still the effects are only temporary and you can say what you like about the cures, there will be a certain number of recurrences.

Dr. Garceau—For the last two years I have spent my time in Germany, France and England, investigating, as

much as possible, our present experimental results in radial therapy. I must say that I am convinced that in it we have the best and most approved scientific treatment for the treatment of the skin. The last few remarks made by Dr. Jones, in the use of the X-ray, I approve of. I think there is no danger in the use of the X-ray if properly handled under proper technique. In London I never saw one single accident in the treatment of the skin, but many beautiful results. I would like to say that, in the treatment of lupus, I have seen nothing to take the place of the original Finsen lamp, where we get the largest amount of ray and where the most beautiful result is obtained. In England I think they have a preference for the use of the X-ray. In skin diseases these instruments are valuable. In alopecia areata I can see no indication for its use, considering the disease of neurotic origin. In the treatment of lupus erythematosus I should consider it scientific treatment. In the treatment of acne I think other methods are just as good.

Dr. McDonald—It seems to me that the X-ray, in a great many cases, has done a great deal more harm than good. I have noticed, in those cases which have been treated with the X-ray, that epithelioma of the lip does not diminish in size, but that the superficial or upper portion first affected sloughs, that the necrosis in the periphery is more rapid and that, whereas an epithelioma may take a long while to spread, in three cases, with the use of the ray, I have seen it take a very rapid course in three months reaching down to the end of the lip. In one case, in which I removed the whole of the lip, there was no infection of the cut edges. About three months afterward, nodules appeared below the jaw and then we treated with the X-ray. This case was most faithfully treated. My experience here was that it did destroy the growth in the center, but the growth at the periphery was very rapid. Another thing, unless you made an incision, the patient's temperature would go up and show all the symptoms of septic poisoning. I have noticed also in X-ray, chronic burns in people who handle the X-ray and who are exposed to it. And the great difficulty is to keep the hands soft, after you have got the cracks at last to heal up. There is no natural sweat. The X-ray is all right in epithelioma of the face. It seems to me that the X-ray does take action on the sweat glands. In the ordinary epithelioma of the lip and face it does more harm than good.

Dr. Himmelsbach—I think Dr. Finsen got his idea, principally, from a professor in the Medical College at Copenhagen, in 1852, who discovered that a number of persons were not pitted by smallpox, when not exposed to light. I would say he made experiments with worms and had part of the box covered with red glass and part with blue glass and noticed that the worms crept from the blue glass to the red. In the recent statistics, Finsen makes no such claims as the gentlemen who entered into discussion tonight, that is as to the number of cures. Finsen's work has been only experimental. I know of a lady who went there from here and she says that the pressure is so painful that she could not stand it. I have heard of the use of the Finsen ray for deep-seated structures. It would be impossible to use that here.

Dr. D'Arcy Power—The limits, in the application of this treatment, have recently been dwelt upon by Dr. Bevin of Chicago. Some of his didactics are worth consideration. He dwelt on the question as to what is the limit in carcinomatous growth. He points out that the total depth is only about 1 c. m. at which you may penetrate. He brings up the question as to whether we can deal with those deeper forms and what will be our future in dealing with them. That brings up the question to which Dr. Jones referred. Those which are most unstable are most readily affected by the X-ray. Bevin proposes to lower the vitality of the already changed tissue so that the X-ray may deal with them at greater depth. He has done this along the line of drugs—iodids and mercury—and by cutting off the blood supply to the tissue which he wants affected. It is a logical and scientific idea that we lower the vitality of the diseased tissue that the X-ray may do better work.

Dr. Stapler—I would like to say a few words in regard to Bevin's idea. He proposed to ligate vessels, in order that the X-ray may penetrate deeper into the tissue. I would say that ligation was proposed by many to cure carcinoma of the uterus or check the growth. If there are some cases treated in this manner by ligation, we cannot say that it was due to the deeper entrance of the X-ray. On the other hand, the X-ray does not act upon the tissue, not as tissue itself, but mostly upon the arteries. The changes in the arteries are most marked.

Dr. Friedlander—With regard to this machine, which I have shown you here, Dr. Grosse said that you would have to treat only a small area at a time, but it can be adjusted so as to treat larger areas. As a matter of fact, the Finsen lamp covers a smaller area than this. As to the treatment of lupus with this machine, I have had only one case of lupus, but the improvement was good. If the Finsen is not properly applied, it is equally dangerous.

Dr. Montgomery—As far as disagreeable results from X-ray are concerned, every person has disagreeable results. In speaking of epithelioma of the lip, it is acknowledged that epithelioma of the lip is likely to give you trouble. I have one patient who has been a great deal benefited, and one case I believed to be cured, because it held back for so long, but which has now increased again. As regards the temporary results from this treatment, as stated by Dr. Barbat, we might say that of everything we do. We postpone the evil day. I have refused to treat epithelioma of the deeper organs, until a patient came to me some time ago who had epithelioma of the breast, and I sent her to the surgeon to be operated upon. It recurred in the scar and when the woman came back she had little nodules under the skin that looked like a developing cancer. It was the most remarkable extension of epithelioma I have seen. Dr. A., who saw her, thought it might be streptococcus infection. Its course since then has proved it not to be epithelioma. That went down with rapidly, under the X-ray. These cases are often quite amenable to the X-ray. As regards the technique, a person ought always to be at it in order to do well. This is, practically, the only experience I have had. As regards the Finsen light, I have not had very much success with it. It does not seem to me nearly so powerful as the X-ray in the cure of diseases. It is a good stimulant. That is a very desirable thing in some cases. In lupus erythematosus, I have succeeded in ameliorating the disease and almost causing it to disappear. Whether that was due to the menopause coming, or whether it was due to the light, I do not know. In another case, I could not get any result from it. With regard to radium, I have had no experience at all. I know that it is extremely violent and will cause burns, not only where you want them, but at quite a distance. I may mention, tonight, the name of a man who used radiotherapy first in the world, and that was Dr. Thayer. He reported on this subject in this society years ago. He reported some cures of lupus with the solar light; he employed a sun glass and got results in one-half a minute. The best treatment for lupus vulgaris is excision.

Several names were proposed for membership, and applications referred to the committee.

Dr. Henry Gibbons announced to the society that as the Trustees had not qualified in the prescribed time under the constitution, the offices were vacant. On motion the Trustees chosen at the annual election were again placed in nomination and duly elected.

Dr. W. I. Terry, librarian, reported that more commodious quarters had been secured on the floor above the rooms at present occupied. The library committee was empowered to purchase carpets, etc., for the new rooms.

A communication was read from the Merchants' Association, thanking the society for its recent action with reference to the site for the new City and County Hospital.

Santa Barbara County.

The regular monthly meeting of the Santa Barbara County Medical Society was held in the parlor of the Arlington Hotel, January 13, 1904.

The meeting was called to order at 8 p. m., by the president, Dr. Charles Anderson, and the following members answered to roll call: Drs. Charles Anderson, Conrad, Blake, Cunnane, Stoddard, Vaughan, Newman; visitors, Dr. W. T. Barry. The minutes of the previous meeting were read and approved.

The board of censors having reported favorably upon the application of Dr. W. T. Barry, he was duly elected to membership.

The secretary's report on the death of Dr. R. M. Evarts was received, and on motion was adopted by the society.

R. M. Evarts, M. D. An esteemed member of the Santa Barbara County Medical Society, died October 2, 1903, after a short illness. His last illness was caused by an injury produced by being thrown from his carriage into an open ditch while driving late at night through an unlighted street. Born in Leon, N. Y., August 27, 1859, and educated in a private school of his native village, he early in life determined to study medicine. His first medical instruction was received in the old Medical College of Buffalo, and he later graduated from the Medical Department of the Howard University of Washington, D. C., December, 1882. The year following graduation he practiced his profession in Dayton, N. Y., from whence he re-

moved to Irving, N. Y., where he remained in active practice for nine (9) years, giving special attention to electro-therapeutics. In 1881 he was happily married to Miss Anne Tully of Washington, D. C., and as a result of this union, he leaves a widow and three charming daughters to mourn his loss. His wife's health failing, he was constrained to give up a lucrative practice and take up his residence on the sun-kissed shores of the placid Pacific.

Be it Resolved, That it is with profound regret that we record the sudden and untimely death of our late colleague and fellow-member. Possessing a genial and generous disposition, he endeared himself to the members of the association and to a large circle of friends. Though with us but a short time, he gave promise by his earnestness of purpose and faithful regard for duty, of becoming one of the successful physicians of Santa Barbara. On behalf of the association, we extend to the bereaved family of the deceased assurances of the inexpressible depth of its sorrow and sympathy in their affliction. We furthermore order that these resolutions be incorporated in the minutes of the association, and a copy thereof be transmitted to his family.

The nomination of officers for the ensuing year being in order, the following names were placed before the society, and on motion made and carried, that the secretary cast the ballot, were elected: President, Charles Anderson; vice-president, C. E. Vaughan; secretary, W. B. Cunnane; treasurer, W. H. Flint.

The paper of the evening, "Acute Gastroenteritis," was read by Dr. Charles Anderson. The author's unique experience in the Philippines and on the Rio Grande made it of unusual interest. The discussion that followed was both lively and entertaining.

After discussing a delectable lunch, the association adjourned. W. B. CUNNANE, Secretary.

Santa Clara County.

The regular monthly meeting of the Santa Clara County Medical Society was held on the evening of January 20th.

Under "new business" the society voted an appropriation of fifty dollars to the State Board of Examiners as its contribution toward legal expenses incurred in defending the State medical law and prosecuting illegal practitioners.

J. LAMBERT ASAY, Secretary.

Sonoma County.

The Sonoma County Medical Society met on the 14th of January, at Santa Rosa, with a full attendance.

Dr. J. W. Jesse, president, outlined the work proposed for the year.

The paper of the evening was read by Dr. R. A. Forrest, and the discussion on the subject of "Emotions in the Treatment of Disease" was carried on by many of those present.

Dr. E. J. Ruddock of Guerneville was elected to membership.

Adjourned at 12 midnight. G. W. MALLORY, Secretary.

Tri-County.

(Santa Cruz, Monterey, San Benito.)

The Tri-county Medical Society met at Hollister, January 5th, at 7:30 p. m.

The annual election resulted in the choice of the following named: Dr. P. K. Watters, Watsonville, president; Drs. L. C. Hull, Hollister, E. E. Briggs (H.), Watsonville, S. B. Gordon, Salinas, W. A. Phillips, Santa Cruz, vice-presidents; Dr. Saxton T. Pope, Watsonville, secretary and treasurer.

Dr. P. K. Watters read a paper before the society entitled, "A Brief Synopsis of the Etiology, Symptomatology, Pathology and Treatment of Appendicitis."

The subject was discussed by Drs. C. E. Beebe, E.

E. Briggs, W. R. O'Bannon, J. M. O'Donnell, J. H. Tebbetts and S. T. Pope.

The annual dues were collected.

It was decided to hold the next meeting at Santa Cruz, March 7th, in conjunction with the Santa Cruz County Society.

SAXTON T. POPE,
Secretary.

BY-LAWS.

(Proposed Constitution and By-Laws of the State Society, continued from page 34, January JOURNAL.)

ARTICLE VI.

COMMITTEES.

SECTION 1. The following standing committees shall be appointed annually: 1, Arrangements; 2, Memorial; 3, Medicine and Therapeutics; 4, Surgery and Anatomy; 5, Obstetrics; 6, Gynecology; 7, Pediatrics; 8, Eye; 9, Ear, Nose and Throat; 10, Genito-Urinary Diseases; 11, Cutaneous Diseases; 12, Nervous and Mental Diseases; 13, Hygiene, Sanitation and Climatology; 14, Pathology and Bacteriology; 15, Chemistry and Physiology; 16, Medical Legislation and Education; 17, Scientific Program.

SEC. 2. The Committee on Arrangements shall consist of five members, the Chairman of which shall be a member of an affiliated society (if there be such) of the county in which the next annual meeting of this Society is to be held. Its duties shall be to perfect the program and make all necessary arrangements for the annual meeting for which it is appointed.

SEC. 3. The Memorial Committee shall consist of three members. Its duties shall be to present a "Memorium" upon those members who have died during the current year.

SEC. 4. The Committee on Scientific Program shall consist of five members. Its duties shall be to arrange the program of reports of scientific standing committees, with discretionary power to select and arrange voluntary papers and discussion thereon, and to furnish a copy of such program to the Committee on Arrangements at least fifteen days prior to date of annual meeting.

SEC. 5. The remaining standing committees shall be designated "Scientific Committees," and shall each consist of five members. They shall report to the Society by contributing papers or other scientific matter germane to their respective subjects.

SEC. 6. The Chairman of each Scientific Committee shall send to the Committee on Scientific Program the names of authors and titles of all papers and reports to be presented from his section at least thirty days before the date of the annual meeting. The papers or reports to be read, or a copy thereof, shall be placed in the hands of the Committee on Scientific Program at least thirty days prior to date of annual meeting.

SEC. 7. No paper, address or report presented before the general meeting, except the address of the President, shall occupy more than twenty minutes. In discussion, no member shall be allowed to occupy more than five minutes, except by consent.

ARTICLE VII.

ORDER OF BUSINESS.

SECTION 1.—General Meeting.

1. Calling to order.
2. Address of Welcome.
3. Address by President.
4. Reading and discussion of papers and reports of Standing Committees.
5. Reading and adoption of minutes.
6. Adjournment.

SEC. 2.—House of Delegates.

1. Calling to order.

2. Roll call.
3. Report of President.
4. Report of Secretary.
5. Report of Council.
6. Report of Editor.
7. Report of Treasurer.
8. Report of Standing Committees.
9. Report of Special Committees.
10. Unfinished Business.
11. New Business.
12. Selection of place of meeting.
13. Election of Officers and Delegates.
14. Reading and adoption of minutes before adjournment of each session.
15. Adjournment.

SEC. 3. The above Order of Business of either Branch of this Society shall be subject to temporary change or suspension by a majority vote of all members present, except the selection of the next place of meeting and the election of Officers and Delegates, as provided in Article VI, Section 2, of the Constitution.

ARTICLE VIII.

COUNTY SOCIETIES.

SECTION 1. All component county societies of this Society or those which may hereafter be organized in this State, which have adopted principles of organization not in conflict with this Constitution and By-Laws, shall, on application, receive a charter from and become a component part of this Society.

SEC. 2. As rapidly as can be done after the adoption of this Constitution and By-Laws, a medical society shall be organized in every county in the State in which no component society exists, and charters shall be issued thereto.

SEC. 3. Charters shall be issued only upon approval of the Council or House of Delegates and shall be signed by the President and Secretary of this Society. The Council or the House of Delegates shall have authority to revoke the charter of any component society whose actions are in conflict with the letter or spirit of this Constitution and By-Laws.

SEC. 4. Only one component medical society shall be chartered in any county.

SEC. 5. Each county society shall judge of the qualification of its own members, but, as such societies are the only portals to this Society and to the American Medical Association, every reputable and legally registered physician who does not practice or claim to practice, nor lend his support to, any exclusive system of medicine, shall be entitled to membership. Before a charter is issued to any county society, full and ample notice and opportunity shall be given to every such physician in the county to become a member.

SEC. 6. Any physician who may feel aggrieved by the action of the society of his county in refusing him membership, or in suspending or expelling him, shall have the right to appeal to the Council, and its decision shall be final.

SEC. 7. In hearing appeals the Council may admit oral or written evidence as in its judgment will best and most fairly present the facts, but in case of every appeal, both as a Board and as individual Councilors in district and county work, efforts at conciliation and compromise shall precede all such hearings.

SEC. 8. When a member in good standing in a component society moves to another county in this State, his name, on request, shall be transferred, without cost to the roster of the county society into whose jurisdiction he moves.

SEC. 9. A physician living on or near a county

line may hold his membership in that county most convenient for him to attend.

SEC. 10. At some meeting in advance of the Annual Session of this Society, each county society shall elect a delegate or delegates, and an alternate or alternates, to represent it in the House of Delegates of this Society, in the proportion of one delegate to each twenty-five members or major fraction thereof, and the Secretary of the society shall send a list of such delegates to the Secretary of this Society, at least two weeks before the Annual Sessions.

SEC. 11. The Secretary of each component society shall keep a roster of its members and of the non-affiliated registered physicians of the county, in which shall be shown the full name, address, college and date of graduation, date of license to practice in this State, and such other information as may be deemed necessary. In keeping such roster the Secretary shall note any changes in the personnel of the profession by death, or by removal to or from the county, and in making his annual report he shall be certain to account for every physician who has lived in the county during the year.

SEC. 12. The Secretary of each component society shall forward its assessment, together with its roster of officers and members, list of delegates, and list of non-affiliated physicians of the county to the Secretary of this Society each year thirty days before the Annual Session. It shall be the duty of the Secretary of this Society to notify all secretaries of component societies, of this requirement, not later than the 15th of March, each year.

SEC. 13. Any county society which fails to pay its assessment or make the report required, on or before April 1st, shall be held as suspended, and none of its members or delegates shall be permitted to participate in any of the business or proceedings of the Society or of the House of Delegates until such requirements have been met.

SEC. 14. In counties where it is not practicable to organize a County Medical Society, any member of the profession in said county may have the privilege of uniting with the Society of an adjoining county, but such membership shall continue only during the time that no organized County Medical Society exists in that county. If, however, it is more convenient for a physician who lives in one county to attend the meetings of an adjoining component society, he may continue as or become a member of such Society.

SEC. 15. Any component society having its privileges suspended for two successive years shall be dropped from the list of component societies.

SEC. 16. If any County Medical Society shall refuse to pay its annual assessment, or to investigate a charge against any member, or to discipline such member if found guilty, or commit any act which may be derogatory to the honor of the medical profession, such society may have all its rights and privileges suspended, on a two-thirds vote of the Council, or of the House of Delegates.

SEC. 17. No member of a component society shall be deprived of his membership unless by his own act, except by a three-fourths affirmative vote of all members present at a regular meeting, and after an opportunity has been given for the accused to be heard in his own defense; but a member shall be dropped on the revocation of his certificate by the Board of Medical Examiners of the State of California.

SEC. 18. No member shall be permitted to resign while he owes dues, or while he is under charges. Any member of a component society who is censured, suspended or expelled, shall have the right

to appeal to the Council of this Society. This appeal must be made within three months from date of the act of censure, suspension or expulsion. The decision of the Council shall be reported to the House of Delegates of the State Society at its next annual meeting for final adjudication.

SEC. 19. When a member shall resign his membership in a component society, he shall thereby forfeit all right and title to any share in the privileges and property of the Medical Society of the State of California, or its subordinate divisions.

ARTICLE VIII.

NOTICES OF DEATH.

SECTION 1. On the death of any member, the Secretary of the Society to which he belonged shall send notice of his death, also biographical data, to the Chairman of the Memorial Committee of the State Society, and to the Editor.

ARTICLE IX.

SEALS.

SECTION 1. The Seal of this Society shall be of the same size and design as the Seal of the State of California. The marginal inscription shall have in the upper segment, "The Medical Society of the State of California"; in the lower segment, "1856 and 1902."

It shall be in the custody of the Secretary of this Society and shall be affixed to all papers emanating from the Medical Society of the State of California.

ARTICLE X.

MISCELLANEOUS.

SECTION 1. All papers read before the Society or any of the Sections shall become its property. Each paper shall be deposited with the Secretary when read.

SEC. 2. The deliberations of this Society shall be governed by parliamentary usage as contained in Roberts' Rules of Order, when not in conflict with this Constitution and By-Laws.

SEC. 3. The Principles of Medical Ethics of the American Medical Association are recommended in the conduct of members in their relations to each other and to the public.

ARTICLE XI.

AMENDMENT TO BY-LAWS.

SECTION 1. The House of Delegates is authorized to amend any Article or Section of the By-Laws by a three-fourths affirmative vote of the delegates present, provided that such amendment has been submitted in writing and laid on the table for twenty-four hours previous to being voted upon.

SEC. 2. The Constitution and By-Laws heretofore governing this Society are hereby repealed, and this Constitution and By-Laws shall be in full force and effect immediately after it is declared duly adopted. All the officers elected at this session, to serve under the new Constitution and By-Laws, shall be such as are required by this new Constitution and By-Laws, and shall be considered duly elected.

(The following is suggested as a substitute for Article VI, as printed above, and is practically the arrangement of committees as set forth in the by-laws recommended by the A. M. A. This arrangement will greatly simplify and bring up to date the manner of preparing a program for a meeting; its success or failure would be determined by the personnel of the first two commit-

tees on Scientific Work. If the right men are placed on that committee for the first two years, the result would probably be a decided improvement on the present arrangement of having a number of minor committees.)

ARTICLE VI.—COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangement, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

SEC. 2. The Committee on Scientific Work shall consist of five members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

SEC. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of public health and of scientific medicine.

SEC. 4. The Committee on Arrangements shall consist of three members appointed by the component society of the county in which this Society is to meet, if there be such component society, or by the House of Delegates or the Council if no component society exists in the county where the Society is to meet. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

AN UNPLEASANT TASK.

It is not always, nor even often, pleasant to run counter to the wishes of a number of people and of one's professional brethren. Perhaps that is why many people who know what they should do, do not do it. It is a pleasure to learn of a city health officer who enforces the law even when opposed by friends and professional associates. Dr. Steinwand, of Selma, recently decided that there should be no public funeral of a child that had died of "croup," on the ground that it was a case of diphtheria, and hence a contagious disease, and a public funeral would endanger the health of the community. He stuck to his point in spite of much newspaper and general abuse, so we are advised, and enforced the law. The JOURNAL congratulates him.

Mortality Statistics.—From statistics compiled by the *Journal of the A. M. A.* it appears that during 1903 the number of deaths of physicians in the United States and Canada was 1648, probably within 5 per cent. of the total mortality in the medical profession in North America. It is estimated that the number of physicians in this country is about 120,000.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors ercep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	Anasalpin Lanolin Lanum Argentum Crede
Argentum Colloidale.....	Collargol Colloidal silver
Beta-naphthol benzoate	Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate....	Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid.....	Antiseptin Asepsin
Bismuth-iodo-subgallate	Airol Airogen Airoform
Calcium beta-naphthol sulphonate	Abrastol Asaprol
Dimethyl - ethyl - carbinol chloral	Dormiol Amylene-chloral Aristol Annidalin
Dithymol Diiodid	Di Thymol Iodid Di Iodo Dithymol (And several other similar names.) Antidolorin
Ethyl chlorid	Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine...	Aminoform Ammonio-formaldehyde Cystogen
" , anhydromethylen citrate..	Formin Saliformin Urotropin Helmitol
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin....	*Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	Dulcin Sucrol Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan
Phenyl-dimethyl-parazon..	Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazon Sedatin

Phenylacetamide.....	Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	Acetophenone Hypnone
Plant pepsin.....	Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine.....	Salochinin Saloquinin
Salicylate of Salochinin	Rheumatin
Sodium sulpho-cafeate	Nasrol Symphoral
Thyroid gland, dried lactose trituration	Iodothyrene Thyroidin
Trioxymethylen.....	Paraformaldehyde Paraform Triformol

Acetyl-salicylic acid = Aspirin
Aluminum aceto-tartrate = Alsol
Australian oil Eucalyptus = Flucol
Bismuth chrysophanat = Dermol
Bismuth phosphate (soluble) = Bisol
Bismuth pyrogallate = Helcosol
Bismuth subgallate = Dermatol
Bismuth beta-naphtholate = Orphal
Calcium permanganate = Acerdol
Calcium salicylate = Colchicin
Catarin hydrochlorid = Stypticin
Chloreton, 1% solution = Aneson
Creosote carbonat = Creosotal
Diethylen-diamin = Piperazin
Guaiacol carbonate = Duotal
Magnesium dioxid = Biogen
Oxyquinaseptol = Diaphtherin
Phenyl-ethyl urethan = Euphorin
Saccharin = Garanotose
Subgallate of bismuth = Dermatol
Sodium chlorate = Oxychlorine
Sodium beta-naphtholate = Microcidin
Tang-Kui, Fl. extract = Eumenol
Trichloracetic acid, 50% solution = Acetocaustic

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

Infant Mortality in France—P. Budin in his report to the Commission de Depopulation on infant mortality gives statistics which are summarized in the *British Medical Journal*. In Paris 145 out of every 1000 deaths are of children under a year old, and in St. Pol-sur-Mer the proportion is as high as 509 per 1000. During the years 1896-1900 the average annual mortality of children under one year in France was 134.434; in fact, the proportion of death to survivors of the same age was higher for the first year than for any other year below the 91st. The three most important diseases are infantile diarrhea, respiratory diseases and congenital debility. Of these, infantile diarrhea accounts for far the greatest number of deaths. Out of every 1000 infants dying in Paris, 380 die from diarrhea, in Rouen 510, in Dijon 584, in Troyes 682. The system of feeding is the most important factor in this result. Of 69 children dying of diarrhea at Boulogne, 8 only were breast-fed children, 20 were bottle-fed and to 41 solid food had been prematurely given.—*Science*.

California State Journal of Medicine.

Published Monthly by the
Medical Society of the State of California

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Business Manager

Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postoffice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, Room 1, Y. M. C. A. Building, San Francisco.

MARCH, 1904.

NOTICE OF REMOVAL.

The Publication Office of the State Society is now established in Room 1, Y. M. C. A. Building, corner Ellis and Mason Sts., San Francisco, where letters should be addressed and where visitors will be welcomed. Take elevator; entrance on Mason Street.

EDITORIAL NOTES.

Since the February JOURNAL was issued, at least two county medical societies have met and have passed resolutions relative to the question of proper and decent advertising in medical journals. These are Alameda and San Bernardino county societies, and the JOURNAL fully appreciates the action taken by them. Every county society in the State should come out and declare itself on this question of right or wrong. Every doctor in the State should know exactly what the issue is, and should come to a decision in regard to his personal attitude in the matter. The editor is about tired of being called a "crank" because he keeps hammering away on this same question, month after month. If he is a "crank" for believing that the nostrum evil and the quack medicine business represent the most important—and, incidentally, the nastiest—issue before the medical profession of the day, he wants to know right away so that the editorial burden may depart from him quickly, and he may once more lead a quiet and a peaceful life. It is not fair to pass the responsibility for the whole thing up to the editor, and then indulge in the free and independent American's privilege—to kick. If

the seductive dollar has more attractions than a right principle, just say so. But if you do think so, then please note the curious and highly edifying spectacle that will surely be presented in time, and is pointed out by Dr. Booth (page 74). A nice business; promulgate a principle of ethics—for the other fellow to follow!

In this discussion of the examination of school children for defects of sight, hearing and breathing, let us get down to the essential fact. Apparently all agree that children should be examined to determine whether they have any condition of the eyes, ears or nose which will interfere with their growth, development and study. In his leaflet published in the STATE JOURNAL, Professor Leslie devoted his energies only to the matter of sight; Dr. Allport thinks Professor Leslie is too involved and scientific for teachers to understand, and believes that a rough examination of the hearing and breathing organs should also be undertaken. The thing is, then, to examine the children. Obviously the ideal method would be to place the whole work in the hands of a trained specialist; but, and also obviously, this is quite out of the question until the millenium shall have arrived. The next best thing is to have the work done by teachers and a report of defects sent to the parents. The test chart suggested and recommended by Dr. Allport is excellent; so are the questions which are to be propounded to the children. But the excellence of this chart does not militate against the leaflet of Professor Leslie, who evidently believes that the teachers should understand, somewhat, the reasons for doing the work which they are called upon to do. Professor Leslie has requested space for a supplementary paper in reply to Dr. Allport's criticisms, in which he will give an outline of how the work is progressing in Los Angeles. Such examinations have been undertaken in San Francisco, and the JOURNAL will later publish a resume of the results thus far accomplished in these two places, under the two methods. It should make valuable material for thought.

Please read carefully the notice from the Committee on Program about the papers to be read at the meeting next month. It is highly desirable—in fact it is mandatory, under our present constitution and by-laws—that all papers be sent to the committee in ample time. Every county society in the State should be represented on the program by at least one paper. No man who will attend the meeting can have so little knowledge and experience as not to be worth a hearing on some of the subjects that will come up. So, if you do not

THANKS FOR RESOLUTIONS.

ABOUT PAPERS.

read a paper, be ready to discuss those which others read. And also, please remember that the papers are to be handed in and are to be published in the JOURNAL and thus become a part of the printed transactions of the society. If you desire to have your paper printed in some other journal as well, write to the editor, advising him of the journal in which you desire to have your paper published, and allow him to arrange for simultaneous publication. The Publication Committee has ruled—and wisely—that papers previously printed in other journals will not be printed in the STATE JOURNAL. This is in no way an injustice, for we desire to publish only first-hand material; and it is a very easy matter to arrange for simultaneous publication, if you desire it.

On page 92 will be found some resolutions recently passed by the Contra Costa County Society.

Similar discussion occurred at the last meeting of the San Joaquin Valley Society. (See JOURNAL, Vol. I, page 376.) At the last-named meeting, a committee was appointed to get the matter into proper shape and present it to the State Society in April, together with a request that the State Society take up the work and endeavor to secure betterment in present conditions. It is utterly absurd for any insurance company to ask a competent physician to make such an examination as could be of the slightest use to it for any fee less than \$5.00. To make a proper examination takes time and care, and that other element, "know how." When the man who knows how is secured, and he devotes the proper amount of time and care to the examination, his result is worth \$5.00 at the very least—and often much more than this small amount. There is hardly a doubt, now that the society represents about three-fourths of the eligible physicians of the State, that concerted and harmonious action would be productive of the desired result. There may be phases of the question that have not come to light in the discussion thus far, and if so it is to be hoped that they will come up and be discussed at Paso Robles. It does not appear that insurance companies are "trusts," but they certainly fit the recently exploited Weberfieldian definition of a "trust"—"A small body of men entirely surrounded by money."

Is extended to the members of the Oregon and Washington State Medical Societies to meet with us at Paso Robles on the 19th, 20th and 21st of April. It is a charming place and a delightful time of year. We have good reason to believe that this will be one of the best meetings the State Society has ever held and that the amount

and character of the scientific material presented will amply repay you for the trip. We say nothing of the gladness with which we would welcome you or the pleasure it would give us to meet you and become still better friends. We on the Pacific Coast should all know each other, and our aims and objects should be common. We are all working for the best there is in medicine, and for the strength that comes from medical organization; therefore, come you down the coast, stop at San Francisco, go with us to Paso Robles, and then with us again to Los Angeles, before you return. The railway people have made a rate of one and one-third fare for the round trip, allowing you to go to such points after or before the meeting, as you may desire, and this rate is extended alike to the members of the Oregon and Washington societies, as to our own. We should like to have you come, and we hope you will; we look forward to seeing you in April.

Since the introduction of the various hexamethylene tetramin preparations, their use has very greatly increased. Of late

EFFECTS OF FORMALDEHYDE. considerable inquiry seems to have been made as to the constitutional effect upon body tissues of the formaldehyde liberated on the decomposition of hexamethylene tetramin. One fact has been noted and should not be overlooked, especially by those who are examining for life insurance. Examination of the urine passed after taking this chemical shows response to a number of tests for albumin. Consequently it will be essential to guard against possible error by eliminating this factor in advance of a urine examination. As to whether or not the amount of formaldehyde liberated (at best a small quantity) is sufficient to produce any changes in the living tissues, and if so to what extent and of what nature, there seems no evidence pro or con. The question is receiving careful attention, and doubtless in due course we shall have some accurate information on the subject. It is unlikely, however, that the formaldehyde will be found to have injurious effects.

Considerable interest has been roused by the experiments of Metschnikoff and Roux in the inoculation of chimpanzees with syphilis. In two recent experiments initial sores and subsequent symptoms developed which apparently were clearly syphilitic. Two experiments are hardly conclusive, however, and we shall await further experimental data with considerable interest. Both animals inoculated, in whom Fournier and others agreed that syphilis subsequently appeared, died very shortly there-

after, the one probably from a pneumococcus, and the other from what may have been an influenza infection. While these secondary infections may have been contributory causes of death, it seems probable that the real cause was the syphilitic infection, and that anthropoids are profoundly affected by the disease will be evidenced as more experiments are made. Unfortunately the chimpanzee is a rather luxurious animal on which to experiment, for he is not only costly, but does not thrive in captivity.

THE UNITED RAILROADS OF SAN FRANCISCO.

In the *New York and Philadelphia Medical Journal* of February 6, 1904, is a news item which says that the New York Board of Health has undertaken to make a bacterioscopic study of paper money to discover if it probably may or may not be a medium for the dissemination of infectious diseases. Should it be shown that paper money habitually does contain disease germs, Dr. Thomas Darlington, Commissioner of the New York Board of Health, will "formulate a plan for the daily or weekly sterilization of money from the great arteries of trade, such as the street-car companies and the great retail stores."

In San Francisco, where paper money does not commonly circulate, the question is not such an important one, but there are three points to which the *JOURNAL* wishes to call the attention of the management of the United Railroads:

Ever since the introduction of the present transfer system, it is the custom for the conductors to wet their thumbs in their mouths to the more easily separate one or two transfers from the block, and not a few of the men will sometimes hold the block between their teeth so as to have two hands free for making change. Neither of these habits is cleanly. The amount of dirt the conductors put into their own mouths does not seem to occur to them, but the *JOURNAL* thinks for them and wishes them to be told what they are really doing. Moreover, the *JOURNAL* thinks for the people and protests against the public being obliged to use spat-on transfers, or have a series of annoying discussions with the conductors, for the *JOURNAL* has found out that conductors object to being asked for dry instead of wet transfers. The transfer itself is, of course, retired after having been used once, but a conductor with a streptococcus or diphtheritic infection latent in his throat could pass out potential amounts of infection to thousands of people every day, and some might easily infect their fingers and then their own mouths from the dirty transfers.

A second point is the way in which coins pass from hand to hand on the cars. Usually the passenger tenders his fare between a thumb and finger. The conductor takes it in the same way

and the fingers of passenger and conductor touch. This contact is not necessary and sometimes may be objectionable, as when a dirty-handed passenger offers money to the conductor, or when a dirty-handed conductor tenders change to the passenger. The correct way is for the passenger to put his fare into the conductor's hand, which should be held out, palm up, to receive it. No personal contact is needed in this transaction. The conductor should put the change into the passenger's upturned palm in the same way, without personal contact. This may be difficult to inaugurate, but a few placards in the cars, with illustrations, will help very much to educate the public, and the conductors can receive instructions from the company's office.

The third point is the hands of the conductors, or rather, the dirt that may be upon them. The *JOURNAL* knows perfectly well that the conductor must work bare-handed, and in a position most exposed to the acquiring of dirt, but it has noticed that some conductors always have clean hands, while others are very dirty-handed. This is no more true of conductors than it is of other men; but the fact that some men have clean hands and are conductors, shows that no one need have very dirty hands, and that hands as dirty as some conductors' hands are absolutely unnecessary. The *JOURNAL* suggests that the company arrange a place, at the end of each line, where conductors may wash their hands, and then make it obligatory that each man wash his hands at the up-town end of each trip.

COLORADO STATE SOCIETY JOURNAL.

Colorado Medicine, edited by Edward Jackson, is the form which the transactions of the Colorado State Medical Society has recently assumed. The monthly journal was authorized at the last meeting of the State Society and the first number appeared in November, 1903. The Colorado society is to be congratulated upon this move. No other single factor is so valuable or can be made to count with such force, as can the society journal properly edited and conducted. That the Colorado journal will be ably conducted under the guidance of Dr. Jackson, goes without saying. Every decent physician in the country should hug himself with a congratulatory embrace at the advent of another State Society journal, for through the medium of these journals will come eventual relief from the pest of nasty, murderous and shameless so-called "medical journals" which have existed too long. If ever a campaign of education and for decency was needed, it is needed now. The rank and file of the medical profession is a long way—a very long way—from the standards of honesty, ethics and decency of a generation or two ago. The average private "medical journal"

lives and fattens on the nostrum maker and the quack; and he, in turn, grows plethoric of dollars through the prostituting influence upon the innocent and ignorant in the medical profession, of these so-called "medical journals." To one who can see with his eyes and think with the brain which he is supposed to have, the whole thing is sickening, disgusting. Yet it will not do to simply keep hands off and let the merry game of swindle go on. It will not do for the decent journals — the journals that can and must be decent — the official mouthpieces of State Medical Societies — to simply keep the nasty stuff out of *their* advertising pages. Their duty is plainly writ and is something more; it should be an active warfare, and not merely a passive and negative doing of the right. It is difficult to express the keen pleasure with which we note the coming of another State Society journal; it means that the day of reckoning, the day when the filthy back-yard of materia medica will be cleaned up, is just so much nearer.

But why all this glee over the starting of a State Society journal? Because the State Society journal will reach and influence more men in its territory than all the other journals published in the world. If organization of the State Society is properly pushed, it ought to represent two-thirds

of the eligible physicians in the State, at the very least. The State journal is the property of every member of the organization; it is the official record of his county and his State Society meetings and transactions. If he does not take a more or less personal interest in it and its doings, then there is something wrong either with him or with the journal—probably with the journal. Now just see what that means. Take our own State, for example. Your JOURNAL reaches more doctors in this State than any possible combination of medical journals published the world over. And so it is in other States where there are State Society journals, and where there are not fights in the medical ranks. The possible influence of these journals, if properly exerted, is tremendous. And it *MUST* be exerted. It is bad enough for a private member of the profession to take this dirty money for these dirty, filthy nostrum advertisements and to make a living or gain notoriety through the pages of a "medical journal" whose every line is for sale and whose every word is a paid lie—but it would be infinitely worse for a journal published by a State Medical Society to do the same thing. State medical societies, for very shame, cannot pursue the policy of "dollars; to h—— with the ethics," as plainly put by one "medical editor," to the writer.

OUR APOLOGY.

In the October number, the JOURNAL took occasion to criticise one of the advertising methods of a very large manufacturing house; in fact, one of the largest chemical houses in the world. The advertisement in question was objectionable for two reasons. In the first place, it contained a glittering endorsement of a chemical recommended for use as a medicine (clearly and unquestionably a breach of both good taste and medical ethics), and in the second place the name of the physician endorsing this preparation, though located, in the advertisement, in San Francisco, does not occur in any register or directory of physicians, and the man has no license to practice medicine in this State. That much is fact; the balance may be a matter of opinion. Believing that the advertisement was rankly misleading, and an injustice to California physicians generally, the JOURNAL saw fit to request the house in question, through our columns, to correct the "error" and apologize for it. We did so for the principal reason that a house of such reputation and standing in the professional and commercial worlds should know enough to be above such peculiar practices. There is no use going after the little fellows, for they don't care; but the big ones ought to care, even if they do not. We wrote to several journals in which the advertisement in question is published, calling attention to the facts stated. One of these journals wrote to the house for an explanation, and in reply received a communication, a copy of which was sent to us. It enclosed a letter from Dr. Carl L. Schilling explaining the matter. We have learned, not directly, that this manufacturer feels hurt by our action, and thinks an apology due from us. The "hurtiness" is based upon two points: First, that there is a Dr. Schilling in

San Francisco, and, second, that the JOURNAL should have written to the house before publishing anything in its pages. In reply to the first contention let us quote from the advertisement and the more recent letter of Dr. Schilling, bearing in mind the fact that Dr. Schilling, while evidently a gentleman of great education and professional learning, is not a legal practitioner in San Francisco:

Advertisement.

"San Francisco, Cal. — I have been using _____ for over two years, and cannot say too much of it. I prescribe it wherever a general tonic is indicated, and with very good results."

Letter of Dr. Schilling.

"It is true that I have prescribed _____, as I have used it myself after an attack of malaria in Port Royal, S. C., and Savannah, Ga."

If the statement in the advertisement is true, and Dr. Schilling has been prescribing _____ "for over two years," the case comes within the provisions of the law, and should be looked into by the Board of Examiners. In his letter, Dr. Schilling states that he is not practicing medicine in California, and has not done so, and as he is evidently a gentleman of education and standing, we may be justified in accepting his own assurance in the matter. We are then confronted by the fact that a much misleading advertisement has been and still is being placed before the profession by this house—a house which claims that its well-known ethical character and high repute should protect it from such uncalled-for criticism. In reply to the second contention for an apology from us, we can only say that if the advertising manager of this house does not know any better than to make an "ethical" house do unethical things, he should be taught. This is the best "apology" we can make, under the circumstances.

AN ILLEGAL PRACTITIONER GONE.

What can be done by one determined man was well illustrated recently at Santa Barbara. A man by the name of Palmer came there and started a "kiropractic" school—whatever that may be. He really came there to practice medicine; unfortunately, for him, he had no license to practice. Dr. Joseph A. Andrews determined that Palmer should go. Correspondence with the Board of Examiners resulted in placing in the hands of Dr. Andrews the necessary information as to how to proceed, get evidence, etc., and of this Dr. Andrews made good use. It was a very difficult matter, however, to get the right sort of evidence, for, as Dr. Andrews says, "those who had been his victims were unwilling to testify, and thus, as they declared, let people know they had been 'taken in,' and others, who had denounced Palmer, when it came to act against him, suddenly experienced a loss of memory. . . . I learned of the case of a farmer, whom I knew, who had paid Palmer \$15 for medical treatment. I had to ride twenty-five miles to get his evidence, but I got it." That was on Saturday; on Monday morning Dr. Andrews had Palmer arrested. The man agreed to leave the State, so the trial was set a week ahead, and no effort was made to bring him back when the case was called and it was found that he had left. He went to Chicago, it is said. This simply shows what a man who is determined may do. There are a whole lot of illegal practitioners in the State who might be run out if the effort was made. The JOURNAL certainly takes much pleasure in congratulating Dr. Andrews.

FUN WITH THE FOREIGNERS.

A California bachelor maid has been spending the last two years in travel in Europe, having a lady's maid as her only companion. In a certain city she went to a hotel much frequented by English nobles, and was there taken sick. The hotel physician, a young English commoner, was summoned. He made a very careful examination and finally pronounced a diagnosis that was reassuring to the Californian, and she spoke her thanks and expressed her satisfaction at knowing that she was not desperately ill. In reply the young Englishman said: "Madame, I assure you that I am treating you as seriously as I would one of my titled patients." Now, the Californian has a delicious laugh, and it began to struggle to the surface. The English commoner looked on puzzled, when the maid, knowing that the laughter would out, hurried him from the room to avoid his being present at a "nervous attack."

The Californian once, at a very formal dinner in Switzerland, was asked by a Swiss surgeon to explain to him, "carefully, fully and slowly," the exact status of women physicians in America. This she chanced to be not able to do, but she told him, wickedly, that in Chicago they were called by the irreverent "hen medicos." Of course this barbarous term demanded definition, and once it had been satisfactorily explained a flood of light burst on the Swiss surgeon. "Oh, yes," he said, "I understand; it is *medicin a la poulette*."

The JOURNAL wishes to offer its sincere apologies to Dr. J. A. Hughes for stating, in the last number, that he had been appointed a member of the Board of Health. The Hughes appointed to this enviable position is Dr. J. V. Hughes, and lest there should be any misunderstanding, it may be stated that it is, more particularly, John V., and not James V., Hughes. We sincerely trust that both Dr. J. A. Hughes and Dr. James V. Hughes will excuse us and accept our assurance that there was no intention on our part to thus place them in a false light.

COMMUNICATIONS.

CALIFORNIA STATE BOARD OF HEALTH.

SACRAMENTO, CAL., February 5, 1904.

To the Editor of the State Journal: Last September the State Board of Health held a Sanitary Conference with the local health officers of the State at San Francisco. A permanent organization was effected, and it was decided to hold the next meeting at Paso Robles at 10 a. m., April 18, 1904, the day before the meeting of the State Medical Society.

This conference is purely of a sanitary nature, having nothing to do with the practice of medicine or its different schools. It is called at the time of the State Medical Society meeting on account of the number of doctors who will be there, making it possible to get a greater attendance. Every physician, no matter of what school, and every health officer or other person interested in the sanitary condition of the State is urged to be present. Papers will be presented on different sanitary subjects, and free discussion held. There will also be a report on needed sanitary legislation.

This board would greatly appreciate any effort on the part of the medical journals of the State to call attention to the conference and secure a large attendance.

Respectfully,

N. K. FOSTER, Sec'y State Board of Health.

A COMMERCIAL OPINION.

To the Editor of the State Journal: I have read with a great deal of interest the marked editorials to which you call my attention in the February number of the CALIFORNIA STATE JOURNAL OF MEDICINE, and I must admire you for the firm and vigorous stand you have taken. You say in effect: "So long as the law stands, it must be observed. If it is an unjust law, then have it repealed. If we permit it to stand, and still ignore it, we are bringing all law and all ethics into disrepute and undermining the whole fabric of society." That this position is sound and tenable cannot be gainsaid. Please accept my honest congratulations. Yours very truly,

This is the opinion of a gentleman connected with one of the largest and best manufacturing houses in the United States.

A LETTER.

Some how or other, there do seem to be more kicks than kisses in the world, and more thorns on the stem than the rose is allowed, by law, to wear. Ordinarily we consider the kicks—and do the best we can—while discounting the kisses. The following letter, apparently personal, is really addressed to every member of the society who thinks right, and we believe that it is therefore addressed to a very large majority of the members. For that reason it is published, and also for the reason that the ratio of the incentive to write a complimentary letter as against the incentive to write a complaint, is about the ratio of 1 to x to the n th power:

"To the Editor of the State Journal: My first copy of your JOURNAL is at hand. I am a new member of the Los Angeles County Society and a long-time member of the Massachusetts Medical Society. My object in writing is to thank you most heartily for that splendid courage which has dared to put 'right before dollars.' I have always made it my rule not to use any medicines which did not declare the formula. You deserve the plaudits and everlasting gratitude of every physician for your position on the advertising question. Yours truly,

"_____,"

A VISIT TO NAHA HOSPITAL.

Loo Choo Islands.

By J. H. GUTHRIE, M. D., Asst. Surg., U. S. N., Portsmouth, Va.

DURING the early spring of 1903 our ship anchored off Naha Okinawa Ken, Loo Choo, or Lin Kiu Islands, having previously been to the picturesque Isle of Oka, one of the many in the chain stretching from Formosa to Kinshu. As is customary when first visiting a foreign harbor, I was sent on shore to look into the sanitary condition of the place and to discover what facilities exist for medical and surgical accommodations. It was while making this investigation that I saw the quaint one-story native house used by the local doctors as a hospital. Inasmuch as Naha (the supreme government seat for all the Loos Choos), has not been visited by our American medical officers since the Perry expedition in 1853, my opinion formed upon first sight is that many changes have occurred since then. I was most favorably impressed with the cleanliness of the streets and the neat appearance of houses and its people. These streets are in the main wide and airy, exceptionally well paved (the macadam method being improved upon), there is a firm surface well adapted to thorough drainage. However, with this apparent surface drainage no filth is observed upon the public thoroughfares, so markedly different from the towns in China, where the same condition exists in its most virulent form. The Japanese do not throw their offal into the streets and the rains therefore carry off all accidental deposits very rapidly.

Naha Hospital is managed by civil and municipal directors, the former are all of the medical profession and practically run the institution. These civil directors, moreover, conduct within the same building quite an efficient medical school of over one hundred students.

The building originally was a rectangular hollow square, with quite a large interior court; since organizing the medical school this court has been encroached upon for additional rooms, used as lecture halls and laboratory, etc. There are no heavy partitions separating these several compartments, the usual Japanese style partition, a light bamboo framework covered with paper is all that intervenes between the medical students and patients. Fronting the street is the most imposing aspect. Here is the entrance leading on either hand to offices, operating room and living quarters for officials. Further back we are ushered into the sick rooms, capable of accommodating from sixty to seventy patients and inside of these rooms, facing the interior court, is the medical school. There are no large wards, as we Westerners understand a hospital. Each patient has a separate room, however, the thin

walls are well made to slide so as to throw several of these small rooms into one large one so that a patient may have any size desired and as much air space as his pocketbook can afford. In other words, it is possible to enlarge or contract your room, with no trouble to speak of, merely a sliding of these screen-like walls.

Likewise the number of trained nurses detailed for patients is regulated by the price paid—the more ministering to their caprices or wants the more money must be handed over. These nurses are all women, the dainty, petite feminine of Japan. They make excellent attendants upon the sick and exhibit an aptitude not excelled by their Western sisters. They are exceedingly quiet and neat, smiling often, but speaking only when necessary, with a certain amount of astuteness that is fascinating and soothing. As they silently trot about in the white gowns and caps of European pattern (having discarded the kimono and bare legs), but for the characteristic national caste of features, one might at first take them for graduates of Bellevue. A very good Japanese custom is to remove the shoes before entering a house. Here in the hospital this custom is religiously adhered to, and right they are, for who but cannot know what an amount of infection there is in our shoe soles? The nurses wear cotton cloth half hose to protect their stockings while working indoors, the rest of their attire, I cannot definitely describe, being unacquainted with all the femininities of dress. Suffice to say, ensemble is tasteful and looks as pure and refined as it possibly could.

To offset all this genuine cleanly appearance of the nurses, are the operating robes of the doctors and medical students. One is not so favorably impressed with their black, somber gowns (having every appearance of dissecting gowns). A thorough baking, followed by boiling and then to a laundry might eradicate the stains of former scenes of bloodshed, but in my opinion the best plan would be to relegate them to a garbage crematory and buy new ones. The operating room, its fixtures, instruments and appliances suggest a lack of care. Many valuable instruments were rapidly deteriorating from this cause. Here were found the very best and most recently improved styles of modern surgical tools, and I was greatly surprised to discover all were made in Japan. The perfect finish, accuracy of design and excellent workmanship observed, after careful inspection by myself of these instruments of Japanese manufacture, bespeak a great compliment to Japan's half century of adoption of Western methods, grown up in our own world after centuries of experience.

Although this hospital at the time of my visit did not come up to our standard of efficiency, still I could see that a spirit of steady improvement

was in progress and I have every reason to believe ere long it will become a first-class institution. The only method of heating was by means of charcoal candles; candles and a small allowance of oil lamps furnished light, making emergency work at night very unsatisfactory to the operator. The building is a one story bungalow, very frail in structure, so it would hardly be practicable to put in a modern heating and lighting plant. It would be best to build a new and substantial hospital and tear down the old one, if such improvements are contemplated.

The attempt to establish a modern working hospital in these outlying islets of Japan, however, shows that although the natives are necessarily behind their brethren of the larger group, Japanese thrift and civilizing influence is taking a strong hold and we may anticipate for this island of Okinawa a bright future. It is a picturesque mountain spot with a delightful climate the year around, and some day will be sought by health seekers, not only throughout the empire, but its salubrious atmosphere shall be renowned the world over.

THE NECESSITY FOR THE SYSTEMATIC ANNUAL EXAMINATION OF SCHOOL CHILDREN'S EYES, EARS, NOSES AND THROATS BY SCHOOL TEACHERS. INCLUDING A REPLY TO PROFESSOR LESLIE'S LEAFLET.

By FRANK ALLPORT, M. D., Chicago, Ill., Prof. Clinical Ophthalmology and Otology, Northwestern University Medical School, Etc., Etc.

[Concluded from page 59, February JOURNAL.]

Concerning the objection to the tests on the ground of its being an unjust tax upon the time and energy of teachers: I have only to say that if the tests are made according to my instructions, this objection is quite as valueless as the others to which reference has just been made. Some years ago, when the tests were first introduced, school principals personally performed the work, which, when it is remembered that in many of the city schools there are perhaps 2,000 scholars, became quite a burdensome and protracted labor. I now advise that each *teacher* examine the pupils in her or his own room, and as there are rarely more than fifty children in a room, the extra work imposed is certainly quite inconsiderable and can be easily performed by either keeping a few children after school each day for a week, or, what is much better, having a regular half day set aside each fall, by the school superintendent, to be devoted to the tests. In this way it can be seen that the tests can easily be finished in a week or a day, according to the method adopted, for from three to five minutes to a pupil is all the time that is required, and by thus systematizing and subdividing the work amongst the room teachers, all the pupils in a city can be examined in the time specified. Some have suggested that the work be done by school cadets, and this is not a bad plan, but inasmuch as the room teachers live in closer contact with the children and come to learn their physical defects by daily observation, it would seem as if they were better qualified to answer the

questions propounded in the tests than any one who might be otherwise designated for the work. I further believe that instead of the tests imposing extra work upon already overworked teachers, that in the end their labor will be materially lightened; for many defective children who, from apparent stupidity induced by unrecognized eye or ear defects obstructing the way to educational acquirements, are the despair and dread of their teachers, who spend hours of time in nerve-exhausting labor in the hopeless endeavor to maintain their grades, may be suddenly transformed by glasses, or by other eye or ear treatment, from thickest density into intellectual brightness, thus relieving the teacher of at least one burden that sends her home at night in a condition of physical and nervous exhaustion. I am confident that if the eye, ear, nose or throat defects in any room in any school could be eliminated, the work of the teacher would be enormously lightened, and, if this is true, they should be willing from purely selfish reasons alone, to say nothing of the benefits to be acquired by the pupils, to cheerfully and gladly see that these tests are annually executed.

Some critics fail to commend the results of the tests because many parents disregard the school warning. This criticism seems rather puerile, and is equivalent to refusing a \$100,000 legacy because \$1,000,000 was not left to the beneficiary. Undoubtedly many parents through ignorance, impecuniosity, pride, neglect, etc., fail to seek medical advice for their children after cards of warning from the school authorities have been received, but on the other hand a large majority of the parents so warned unquestionably do as they are advised, and profit thereby. It has also been observed that most of the parents who primarily ignore the warning, from seeing the beneficial results upon their neighbors' children, or from the awakening of latent parental responsibility or from some other cause, eventually seek medical advice and become stout advocates of the plan. In any event, even if only a small minority of defective children are benefited by the tests, they are certainly worth while, and the tests should not be abandoned because all parents are not ready to receive them. Some observers regard the tests lightly because they are frequently abandoned after having been used for one or two seasons. This is a most unjust criticism, and does not in any way argue against the usefulness of the plan, but does emphatically argue in favor of the inexcusable neglect and laxity of the school authorities. There can be no doubt of the enormous utility of the tests when properly and persistently applied, and yet it is but human nature to shirk all possible work, and as most teachers are already overworked, unless the school authorities annually urge, or *demand*, the execution of these tests, they may fall into general disuse and eventual abandonment. I wish, then, to earnestly plead with those in authority not to leave this matter to the option of individual teachers, but to *require* that the tests become a regular part of the school curriculum, and that they be *annually* performed at the commencement of each fall term. Many teachers object to the tests on account of the elaborate records and statistics suggested or required in some cities where the plan has been adopted. When I first proposed the tests I advocated rather elaborate statistical records, to be kept by the school teachers. Experience has, however, considerably dampened my ardor in this direction, and I now recommend the very simplest records, or none at all. A multiplicity of records can scarcely aid us in deductions which are already trite, and from the examination of thousands of teachers' reports I can hardly recommend them as very valuable from a medical standpoint. To my mind they represent more useless work than

actual value, and while some records should possibly be retained, I would advocate that they be of the most elementary character, perhaps simply giving the name of the pupil, and whether a card of warning was given, and whether it was for an eye, ear, nose or throat defect. This brief report could be handed to the school principal, and then to the school superintendent, and would simply show that the tests had been made, which is really about all that is necessary. I wish to emphatically urge that the less elaborate the tests can be made in every way the more surely will they be performed and that there is no surer method of defeating the end in view than by elaborating and embellishing what should be a simple and uncomplicated affair.

Some observers have raised the objection that until the tests can be legally enforced by act of legislature, it is useless to advocate their adoption by school and health authorities, as they will not be performed except under compulsion. This argument seems almost an insult to intelligence and benevolence, and I am well convinced that when boards of health, boards of education, school superintendents, school principals and school teachers once become convinced of the usefulness and necessity of the tests, and the ease with which they can be accomplished, legal authority will not be needed to enforce their adoption. Be that as it may, however, and admitting that legal enforcement by the State Legislature, as has been accomplished in Connecticut, is the best method of securing the end in view (a statement which I am not at all prepared to accept) certainly there can be no better process by which to popularize the movement than by first appealing to the intelligence of health and educational boards, school authorities and the people at large.

Some critics have objected to the tests on account of their expense. In the first place even if the expense was multiplied many times its actual amount, this objection should shame the objector when the enormous possibility for good, resident in the tests, is considered. Besides this, the expense is so small that it should not for one moment be considered, as, even for a large city containing 5,000 schoolrooms, the expense need not exceed \$100 a year after the first year. Each schoolroom should possess a chart, which will be subsequently described. When purchased in large quantities these charts, with teachers' instructions attached, can be purchased for \$80 a thousand. A city with 5,000 schoolrooms can, therefore be supplied with a chart for every schoolroom for \$400. After being used, the charts can be carefully laid away and preserved for future use, so that new charts will only be necessary once in several years. The only other expense will be for the warning cards to be sent to parents, and the simple report blanks to be retained at school, which for even a large city could not exceed \$100 a year.

I have been at work on this movement ever since 1895, endeavoring to perfect and simplify the plan, and to secure its adoption in various cities and states. Over 10,000 mailed communications of various kinds, including letters, circulars, etc., have passed out of my office during that time. Much encouragement and, I am sorry to say, considerable opposition, chiefly of a professional nature, has been encountered; but the work has gone steadily on, and today the tests are quite generally used throughout the United States, and in some cities of Europe and Asia. At the last meeting of the American Medical Association, held in New Orleans, May, 1903, I secured the passage of the following resolution, both by the Ophthalmological Section and the House of Delegates:

"WHEREAS, The value of perfect sight and hearing

is not fully appreciated by educators, and neglect of the delicate organs of vision and hearing often leads to disease of these structures, therefore be it

"Resolved, That it is the sense of the American Medical Association that measures be taken by boards of health, boards of education and school authorities, and, where possible, legislation be secured, looking to the examination of the eyes and ears of all school children, that disease in its incipency may be discovered and corrected."

I sent a copy of this resolution to the president and secretary of every State Medical Society in the United States, and asked them to secure its adoption at their next meeting, believing that the favorable action of the American Medical Association, and the various State Medical Societies, would be a strong argument to the different State boards of health and education. Nearly every State Medical Society which has convened since the last meeting of the American Medical Association has passed the resolutions, and I am gratified to here enumerate them: South Dakota, Michigan, Montana, Delaware, Minnesota, Colorado and New York; the Southwestern Missouri Medical Association, and the Mississippi Valley Medical Association have also passed them, and I believe that practically all the other states will do likewise, as their annual meetings occur.

I have also communicated with every president and secretary of every State board of health and State board of education in the United States; sent them the resolution; stated the necessity for the tests; handed them a question blank to be made out; and asked them to pass the resolution and set the plan in operation in their several States. I also sent them a circular, containing a description of the tests, which has been for a year or more sent out by the Illinois Board of Health to all county superintendents of schools, requesting them to place the plan in operation in their various counties. I also sent them a circular issued by Mr. Almer Coe, of 74 State St., Chicago, Ill., giving prices for the test cards, with teachers' instructions attached.

As a result of these communications and inquiries, I found that while the tests were being quite generally used from one end of the country to the other, they were being systematically used only in Connecticut (under a State law), New York (under the State Board of Health), Illinois, where I had a year or so ago secured their adoption by the State Board of Health; Montana, Indiana and Minnesota. Shortly after my communications had been distributed, however, the State Board of Education of Texas passed the resolution and placed the tests in operation in that State.

I secured the adoption of these resolutions last October at the meetings of the State and Provincial Boards of Health of North America and the American Public Health Association, feeling that as the membership of these societies is composed of members of the different health boards in the various States, that they would return home convinced of the usefulness and necessity for the plan, and secure definite action at their next State board meetings. Nor have I been disappointed, for in reply to another urgent appeal sent to the various State board of health officers early in November, I have already received replies from Wisconsin, South Dakota, Michigan, Florida, Kansas, Colorado, Ohio and many other States, telling me that at the next meeting of the boards, the resolution will be adopted and the tests placed in operation, generally after the manner indicated by the Illinois circular. As soon as I have further good news to report I shall again appeal to the various boards of education, telling them of the action of the boards of health throughout the country, and urging

them to unite with them in this most laudable undertaking.* I shall again appeal to all boards of health who have not adopted the plan, and also to the various State medical societies as they meet from time to time. In a word, I am confident that at the next meeting of the American Medical Association in June, I shall be able to report that the plan has been endorsed by almost every State medical society in this country, and is in operation in almost every State, under the supervision of the several boards of health and education.

Having now gone over the subject as fully as seems desirable under the circumstances, and endeavored to answer most of the important objections to the tests that have been from time to time enumerated, I will now endeavor to describe the details of the tests, and demonstrate the ease and facility with which they may be accomplished.

The chart which I recommend contains the ordinary test letters of Snellen, so constructed as to size as to be seen by a normal eye at certain definite distances. For instance, the line marked 20 should be seen by a normal eye at twenty feet, producing vision which is designated by the fraction 20/20. The line marked 100 should be seen by a normal eye at one hundred feet, etc. Should, however, an eye only be able to read, let us say, the line marked 70 at twenty feet, the vision would be expressed by the fraction 20/70, or if an eye should possess better than normal vision and be able to read the line marked 15 at twenty feet, the vision would be expressed by the fraction 20/15. The distance between the child and the chart always constitutes the numerator of the fraction, while the smallest line which the child reads constitutes the denominator. If even the largest number, marked 200, cannot be seen at twenty feet, the vision may be expressed by ascertaining the distance at which fingers can be counted. It sometimes happens that fingers cannot be seen and that vision is reduced to a mere perception of light, or even to total blindness. The reason for testing vision at twenty feet is simply because this is usually a convenient distance, used the world over for this purpose; it is well, therefore, to adopt the customs already in vogue.

Below the testing letters on the chart will be found the teachers' instructions as to how the tests are to be made, this portion of the chart being separated from the Snellen's Test Types by a half broken line through which the teacher should separate the upper from the lower card, the former of which should be hung on the wall when the tests are in progress, and the latter retained on her desk for guidance.

The card of instructions reads as follows:

.....
Please detach by breaking on this line.

Instructions for the Examination of School Children's Eyes, Ears, Etc. After the method proposed by Dr. Frank Allport of Chicago, Ill. For use of Principals, Teachers, Etc.

Do not expose the card except when in use, as familiarity with its face leads children to learn the letters "by heart."

First grade children need not be examined.

* The Illinois circular consists of a circular issued annually by the State Board of Health to all county superintendents of schools throughout the State. It endorses the idea of the annual systematic examination of school children's eyes, ears, etc., by school teachers, and gives full instructions as to how it may be done. The circular urges all county superintendents to issue similar circulars to all local superintendents of schools, urging them to have the tests annually made in their several localities. Copies of the Illinois circulars may be obtained by communicating with Dr. J. A. Egan, Secretary State Board of Health for Illinois, Springfield, Ill.

The examinations should be made privately and singly.

Children already wearing glasses should be tested with such glasses properly adjusted on the face.

Place a card of Snellen's Test Types on the wall in a good light; do not allow the face of the card to be covered with glass.

The line marked XX (20) should be seen at twenty feet; therefore place the pupil twenty feet from the card.

Each eye should be examined separately.

Hold a card over one eye while the other is being examined.

Do not press upon the covered eye, as the pressure might induce an incorrect examination.

Have the pupil begin at the top of the test card and read aloud down as far as he can, first with one eye and then with the other.

Facts to be ascertained:

1. Does the pupil habitually suffer from inflamed lids or eyes?
2. Does the pupil fail to read a majority of the letters in the number XX (20) line of the Snellen's Test Types, with either eye?
3. Do the eyes and head habitually grow weary and painful after study?
4. Is the pupil probably "cross-eyed"?
5. Does the pupil complain of earache in either ear?
6. Does matter (pus) or a foul odor proceed from either ear?
7. Does the pupil fail to hear an ordinary voice at twenty feet in a quiet room? Each ear should be tested by having the pupil hold his hand over first one ear, and then the other. The pupil should close his eyes during the test.
8. Is the pupil frequently subject to "colds in the head" and discharges from the nose and throat?
9. Is the pupil an habitual "mouth-breather"?

If an affirmative answer is found to any of these questions, the pupil should be given a card of warning to be handed to the parent, which should read something like this:

Card of Warning to Parents.

After due consideration it is believed that your child has some eye, ear, nose or throat disease, for which your family physician or some specialist should be at once consulted. It is earnestly requested that this matter be not neglected.

Respectfully,

.....
School.

If only an eye disease is suspected, the words "ear, nose or throat" should be crossed off; if only an ear disease is suspected, the words "eye, nose or throat" should be crossed off; if it is only a nose or throat disease, the words "eye and ear" should be crossed off.

It will be observed that these cards are non-obligatory in their nature. They do not require anything of the parent, who is at perfect liberty to take notice of the warning card or not, as he sees fit. They simply warn the parent that a probable disease exists, thus placing the responsibility upon the parent.

Nevertheless, if parents neglect the warning thus conveyed, the teacher should from time to time endeavor to convince such parents of the advisability of medical counsel. Teachers are urged to impress upon pupils and parents the necessity for consulting *reputable physicians*.

These tests should be made annually at the beginning of the fall term, and should include all children above the first grade.

scopical examination. The prevalence of a malignant cellular proliferation leads to the false supposition that originally it was a case of renal carcinoma or sarcoma. Such was the consideration which in case I, whose early symptoms had occurred six years previously, induced me to form the diagnosis of a Grawitz tumor.

In case II a patient was presented to me who had suffered from hemorrhages—it is true for one year only—but they had been very profuse. The patient was anemic and had lost considerably in weight; still he presented by no means the appearance so characteristic of carcinomatous cachexia as I should have expected in a renal carcinoma causing such profuse hemorrhages. We are aware of the fact that Grawitz tumors are very much inclined to hemorrhage owing to their histological structure.

Concerning the question of a probable diagnosis of a Grawitz tumor *intra vitam* and its treatment, I take the liberty of submitting to you the following conclusive results, retrospective of the pathogenesis of a Grawitz tumor:

1. A Grawitz tumor is a frequent condition of renal tumors, in my opinion perhaps the most frequent of all. It is a benign tumor which can exist for years with more or less pronounced disturbance. On the other hand, primary carcinoma of the kidney is very rare.

2. A Grawitz tumor, in consequence of its sanguineous condition, easily causes hemorrhages of a more or less pronounced violence and duration; they cause corresponding degrees of anemia which endangers the health of the patient. But this anemia has no relation with those cachexias in renal carcinoma, even after a short existence. A Grawitz tumor forms no metastases and does not invade the neighboring organs, provided the vessels are not intruded by it, in which case its nature becomes malignant.

3. Since the danger of a transition into a malignant state is always present in a Grawitz tumor, the invaded kidney should be removed as early as possible, in case of suspicion of the existence of such a tumor, provided, of course, the condition of the other kidney does not contraindicate such an operation.

4. After years of a benign condition a Grawitz may turn into malignant tumor, and from hemorrhages, softening, hyalin degeneration and malignant proliferation it may appear transformed in its structure to such a degree that its real origin cannot be recognized at all, or only with the greatest difficulty, in spite of the most careful microscopical examination. Surely not an inconsiderable number of malignant renal tumors of many years' existence may have originated on this basis.

5. Considering the adduced arguments, I believe a diagnosis of a Grawitz tumor *intra vitam* can be made with a certain degree of probability.

UNDIGESTED THOUGHTS AND COMMENTS.*

By JAMES P. BOOTH, M. D., Los Angeles.

GENTLEMEN: Just before leaving my home to be present at your meeting today, the thought occurred to me that at these meetings there always occur some moments of leisure time, when there is no paper to be read, when no one cares particularly to talk, and when perhaps a brief paper might be relished, even though it be hastily written, and perhaps altogether indigestible. I concluded then to prepare under the above heading, and read to you if permitted to do so, some of my gleanings from recent readings in the medical journals, together with my crude opinions on the matters treated. My object is to provoke discussion, and the fact that a varied assortment of opinion is presented will no doubt excite one or two members at least to present their views on each subject.

Sun Pain.—In his scholarly "History and Etiology of Migraine," Dr. George M. Gould of Philadelphia says (*Journal American Medical Association*, January 16, 1904): "The old term 'Sun Pain,' applied to the disease, is of illuminative significance. It was so called because it lasted, in olden times when the theory was formed, only so long as the sun shone, and ceased with darkness. Now, in those times all reading and writing was done by daylight. At night the absence of artificial lights compelled cessation of literary, sewing, and handicraft occupations. With this ocular rest, as always, came immediate relief of the ocular reflexes called headache and megrim." How far back the "olden time" dates is not shown, but "Sun-pain," with all of its concomitant terrors, and distressing sufferings, is not so old but that some of us who have practiced the Healing Art in the swampy regions of our Southern rivers, recognize and remember in the name an old enemy. In those old days, "Sun-pain" was believed to be solely of malarial origin, and its punctual periodicity of attack, together with its vanquishment by quinine, were cited as proofs positive of that origin. Those old practitioners who remember these facts will also call to mind that the "Sun-pain" of the "olden time" occurred quite as frequently among the negro slaves as it did among the whites. In those days the negro was not given to reading and writing, but his work consisted of plowing, hoeing and wielding the axe; yet those same negroes who were not at all given to literary work, suffered the torments of "Sun-pain" just the same—a pain which no ocular rest could relieve, but which quinine cured. *Tempora mutantur, et nos mutamur in illis.* Is it possible in the changes that do so regularly occur that the old-fashioned "Sun-pain" of ma-

* Read before the San Bernardino County Medical Society, Feb., 1904.

larial origin has changed to a more advanced and fashionable pain produced by literary eye-strain?

Training School for Male Nurses.—"Dr. N. Sallume, Toledo, Ohio, inquires where there is (sic) a hospital or other institution where male nurses are trained."—*Journal American Medical Association*, January 30th, page 323. Male nurses! Male nurses! Ah! yes, time was when we did have male nurses, but alas!

Time hath, my lord, a wallet at his back,
Wherein he puts alms for oblivion,
A great-sized monster of ingratitude;
Those scraps are good deeds past, which are devoured
As fast as they are made; forgot as soon
As they are done.

Seriously, has it ever occurred to you how thoroughly and completely the female nurse has monopolized the field? While not denying the soothing, tender touch of her hand in typhoid and other lingering fevers, and while conceding to her the entire field in obstetric and gynecologic nursing, don't you think she is better off isolated, in cases of *fistula in ano*, buboes, gonorrhoea, and abscesses or ulcers of the genitalia and rectum, in the male?

The Control of Prostitution is agitating the morally inclined, and particularly the religionists, in many of our cities and towns. In Los Angeles the latter have made a most vigorous crusade, marching in bodies to the abodes of the *demi-monde*, and with promises of homes, and words and sweet songs of consolation and advice, have endeavored to persuade the fallen ones to forsake their evil ways and embrace a life of religious purity. The appeal was ineffectual. When the constabulary interfered, however, and brought the power of the law to bear upon them, both landlord and tenant were frightened into a seeming abandonment of their business. But has the flight of the offenders from the scene of their misdeeds had any real value on the control of prostitution? Not one bit. It has simply disseminated clandestine prostitution. The vice which was shut up in the bawdy house, and the crib, is now secretly carried on in the hotel and the lodging house. Is this a control or even an improvement? On the contrary, it increases the evil and its results, both morally and physically. Dr. M. L. Heidingsfeld, clinical lecturer on dermatology and venereal diseases in the Miami Medical College, Cincinnati, says, in the *Journal American Medical Association*, page 309: "Suppression of prostitution is impossible, and control is impracticable—it is absolutely incapable of coping with the larger and more dangerous class of clandestines, and it is powerless and impotent to materially prevent the spread of venereal diseases, emanating from those directly under control. Its influences are decidedly pernicious and harmful, inasmuch as it de-

feats salutary segregation, increases the dangerous class of clandestines, restricts liberty, and infringes on personal and constitutional rights. It legalizes crime and fosters disease and immorality, by imparting a false sense of security, and is virtually a deception and a snare. It creates opportunities for blackmail and personal gain, brooks an unjust and often unendurable interference, and discourages necessary and salutary medical attention. There are far more rational and legitimate measures for the prevention of the spread of venereal diseases" (and we might add, the control of prostitution) "along the lines of the suppression of abortionists, and the inculcation of general and individual education and prophylaxis." As long as the abortionist affords an easy escape for the sexually inclined female, just so long will clandestine prostitution continue, and just so long as clandestine prostitution continues, just so long will uncontrolled and uncontrollable venereal diseases continue.

Secret Remedies.—"Why cannot physicians write their own prescriptions, and adapt their remedies to the ever-varying exigencies of disease? Why should the vender of proprietary and secret remedies be upheld by so many of the profession, when Edward Jenner, after twenty-two years of laborious experimentation and research, freely gave the priceless boon attained to mankind, and when he could have made countless billions of money from the whole world by dispensing it as a secret and sovereign remedy against a loathsome and desolating scourge?"—Wm. T. Howard before the Maryland Medical Society, and published in the *Journal American Medical Association*, January 30th, page 296.

"**Hemorrhoids** curable without surgical interference. Immediate relief followed by a complete cure in every instance is produced by Dr. Bartlett's formula put up under the name of the Bartlett's ———, 14 in a box and sold at \$1.00 by druggists, also sent by mail, etc." — *Same journal, same date, advertising page 57.*

Query: Why cannot medical journals which preach ethics refuse their advertising columns to these "venders of proprietary and secret remedies" and set the profession a good example of "practice what you preach"?

Contract Practice.—We are told by many practitioners, and taught by all the medical journals, that contract practice is unethical, and I believe it is. The question is, where is the line to be drawn? One medical man says "it is wrong to accept the contract work of the various lodges," and yet he accepts examination work from insurance companies at so much an examination—and

the fee is invariably stipulated by the company. "But," says another, "I will not make a physical examination, and place my name to a certificate, unless I be allowed to stipulate my fee, whether it be for an individual or a corporation"; and yet this same practitioner accepts a position with a railroad corporation and signs a contract to do an unknown quantity of professional work for a pass and perhaps fifteen or twenty dollars per month; frequently for the pass alone.

How quickly nature falls into revolt
When gold becomes her object.

The Doctor's Dream.—The medical man is the poorest paid "laborer in the moral vineyard"—and no wonder he occasionally falls into verse, since he cannot fall into estates. Here are some doggerel lines which I read the other day, and with which I will close my disjointed scrawl, for "a little nonsense now and then is relished" even by the wise physician.

Last evening I was talking
With a doctor aged and gray,
Who told me of a dream he had—
I think 'twas Christmas day.
While snoozing in his office
The vision came to view,
For he saw an angel enter,
Dressed in garments white and new.

Said the angel: "I'm from Heaven;
The Lord just sent me down
To bring you up to glory
And put on your golden crown.
You've been a friend to everyone,
And worked hard night and day;
You've doctored many thousands,
And from few received your pay.

"So we want you up in glory,
For you have labored hard,
And the good Lord is preparing
Your eternal, just reward."
Then the Angel and the doctor
Started up towards Glory's gate,
But when passing close to hades
The Angel murmured, "Wait;

"I have got a place to show you,
It's the hottest place in hell,
Where the ones who never paid you
In torment always dwell."
And behold, the doctor saw there
His old patients by the score,
And grabbing up a chair and fan,
He wished for nothing more.

But was bound to sit and watch them
As they'd sizzle, fry and burn;
And his eyes would rest on debtors
Whichever way they'd turn.
Said the Angel, "Come on, doctor;
There's the pearly gates I see."
But the doctor only muttered:
"This is Heaven enough for me."

He refused to go on further,
But preferred to sit and gaze
At the crowd of rank old deadheads
As they lay there in a blaze.
But just then the doctor's office clock
Cuckooed the hour for seven,
And he awoke to find himself
In neither hell nor Heaven.

PUBLICATIONS.

Blood-Pressure in Surgery; an Experimental and Clinical Research. The Cartwright Prize Essay for 1903. By George W. Crile, A. M., M. D. Published by J. B. Lippincott Company. The volume in question represents a large amount of research, undertaken with the object of, if possible, clearing up some of the confused ideas on this most important subject. "Investigation of the views as to the various causes of low blood-pressure in surgical cases, (*Can a "surgical case" have a low blood-pressure?*—Ed.) and of the methods employed in controlling the same in the various clinics of the surgical world, reveals a diversity of opinion as to the former and a diversity of method as to the latter." To combat this lowered blood-pressure, many things are used by different men. Digitalis, strychnin, nitroglycerin, ether, atropin, caffein, ergotin, etc., are employed; "synergists and antagonists simultaneously, while some surgeons give no drugs." The work gives full data of the experiments in which all of these things were used, and also a large amount of data in connection with actual operations undertaken experimentally. It is a very complete essay, from the laboratory side, on this very grave question.

U. S. Department of Agriculture. Poultry as Food, by Helen W. Atwater.

Standards of Purity for Food Products. Circular No. 10, office of the Secretary. This is the first leaflet of the standards of this class, authorized under the act passed and approved June 3, 1902. That act authorized the department to determine standards for food-stuffs, but there is no accompanying authority to see that the standards so fixed shall be carried out. The present leaflet covers meats, milk and its various derivatives, sugar, candy, spices and cocoa.

Misoneism. A charming word employed by Dr. Archilles Rose, in the *Post-Graduate*, to indicate "the deeply rooted inclination of mankind to combat new ideas." He says: "We find in the history of the world, and especially in the history of medicine, innumerable instances in which new ideas have been persistently rejected, which Time has nevertheless proved to be of the greatest service to mankind." Agreed.

Prehistoric Trephining. *American Medicine*, Jan. 2d, 1904, prints some editorials giving an excellent resumé of this, to some of us, interesting subject. I may add to what is there set forth the fact that some three or four years ago I operated on several dogs, trephining the skull—in fact, performing the whole operation—with aboriginal flaked or chipped implements. The dogs recovered from the operation. One specimen is deposited in the Army Museum, Washington, D. C.; the others seem to have been lost. At the time they were performed, these were the first and only operations of the sort recorded. They were done to determine the then disputed point, whether an animal could be so operated upon and recover from the operation.—P. M. J.

A CASE OF CHRONIC SUPPURATIVE DISEASE OF BOTH FRONTAL SINUSES—OF BOTH MAXILLARY ANTRA—THE ETHMOID CELLS ON THE RIGHT SIDE OF THE SPHENOIDAL ANTRUM—WITH DEMONSTRATION OF PATHOLOGIC SPECIMENS.*

By REDMOND PAYNE, M. D.
Oculist, Aurist and Laryngologist to the Southern Pacific Hospital,
San Francisco.

Operations and Recovery.

BECAUSE of the very complicated character of this case, nearly all the accessory cavities having been involved at the same time, I consider it worth reporting to you.

The patient, Miss D, age 30, had been suffering from severe headaches, frontal and occipital, for 10 or 12 years, which were often associated with vomiting and fever and regarded as sick headaches. About five years ago in one of these attacks, the nose became slightly swollen and the right lower eyelid edematous, all of which subsided as the attack passed off. The attacks since that time have been more frequent all the way from every six months to every six weeks, each attack lasting 10 days or two weeks. Sometimes the upper lid of the right eye also being edematous. This would subside after the attack, but the nose, especially the end, remained enlarged and reddened. In one or two recent attacks the skin on the right side of the face and nose and eyelids became greatly swollen and glazed, the skin peeling off as after an erysipelas. Between these severe attacks she was never free from pain, it being greatest at the occiput, and there was also a constant sensation of pressure across the nasal bones and over the frontal sinuses, at times over the whole face; for several months past there has been an afternoon temperature, at times 101.

So much for the conditions that were present, externally and subjectively, all of which would have suggested at once to the rhinologist that an accessory sinus was at the bottom of it and he would have proceeded to explore the nasal chambers accordingly. In this case it will be interesting to note what was not present. There was no mouth breathing, the naso-pharynx and nasal chambers were perfectly free. There was no discharge or history of discharge, either anteriorly or posteriorly. There were no polypi, or polypoid degeneration of any portion of the mucus membrane of the nose proper; the inferior turbinates on both sides were normal, the middle turbinate on the left side slightly hypertrophied and that on the right side (where we had the most trouble) was considerably hypertrophied and edematous. Trans-illumination gave both antra and both frontal sinuses uniformly dark, so that its information was negative. We were left with but one definite localizing sign, that was the edema of the eyelids and internal canthus of the right eye, which was strongly suggestive that the ethmoid cells were involved.

Proceeding upon this conclusion, the right middle turbinate was removed completely and the anterior wall of the ethmoid cells broken down, with considerable relief to the pain, but otherwise no change except to show that pus was coming from the infundibulum and probably from the maxillary ostium; as only a drop or two appeared in the field, how-

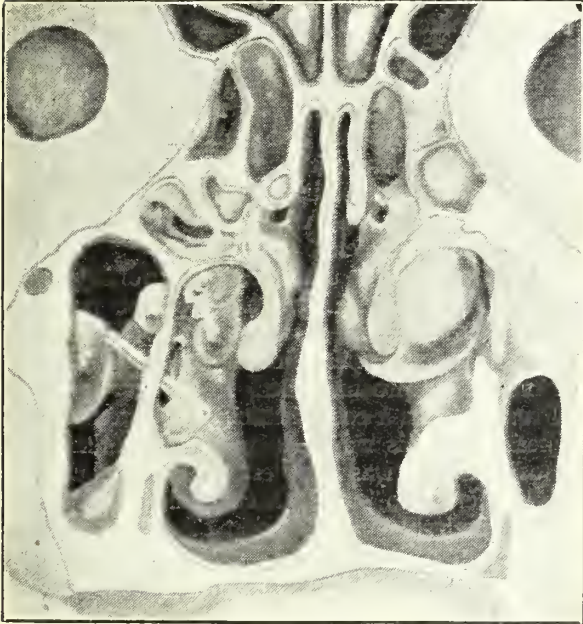
ever, an exploratory opening was made through the canine fossa of both antra with the result that a drachm of creamy pus flowed from each one. From the right antrum I took this large quantity of granulation tissue and polypi, probably one-half ounce, and from the right frontal sinus, which was opened in front, the infundibulum freely enlarged into the nose, I took this large serous cyst in addition to quite a quantity of small polypi and granulations. Through the right frontal sinus I opened the posterior ethmoid cells more freely than had been done through the nose, removing several polypi, which I did not save. There was a small quantity of pus from both the frontal sinus and the cells. All the symptoms subsided in a few weeks except the pain at the occiput, and some edema remained at the internal canthus. In spite of the very thorough curettment of these sinuses, the pus discharge continued very profuse—two hours after irrigation of the right antrum I found it again filled with pus—but when the frontal sinuses and antrum were irrigated the latter did not refill for 12 to 24 hours. Here was an indication at once that the frontal sinus communicated with the antrum. There was but one source for the pus and that was the left frontal sinus, which I then opened, finding quite a quantity of small polypi and granulations and a small quantity of pus in the infundibulum. The infundibulum was enlarged into the nose. At this operation, which was two months after the first, I re-curetted both antra and the other sinus and posterior ethmoid cells, the granulating areas of which were infected by the pus running over them. From this time on the sinuses operated on went on to complete recovery. All the symptoms subsided except, as after the first operation, the occipital headache, which still persisted. I then regarded the sphenoidal antrum and anterior ethmoid cells not already reached as probably also involved, and accordingly laid open freely the anterior walls and broke down the floor with a curette. This was done under cocaine, and was followed with entire relief from occipital pain and the sensation of pressure, in a very few days. The patient has made practically a complete recovery, is free from all headache and fever, has gained in flesh and general health, the nose has become normal in size and color, etc. Before the eyelids became prominently affected, the headaches were considered as due to a condition of the stomach requiring lavage, which treatment was carried out for several months. This not being effective, the pelvis was held responsible, the uterus curetted and an ovariectomy done. I have no reason to believe but that both these conditions were present and the treatment indicated, but the symptoms for which both were done were the severe and continuous headaches.

This case is reported, not because the condition is unusual, but on the contrary that it is rather common. About the only very uncommon feature about the case is the involvement of nearly all the sinuses in the one patient. This case simply serves to prove the rule in chronic suppurative disease of the accessory sinuses, viz.: that they are usually filled with polypi, granulations, connective tissue bands, and lined by a pyogenic membrane which can be treated effectively only by methods of operation that will enable one to explore every wall of the sinus operated upon.

Take, for example, the management of chronic empyema of the maxillary antrum. Our diagnosis

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

must exclude the possibility of other sinuses draining into it, then, unless some tooth is distinctly the cause of the trouble, the operation should consist in making a large opening through the canine fossa and enlarging the normal nasal



ostium freely; this enables one with a head mirror and ear speculum to examine every wall of the antrum carefully and accurately; the No. 1. laryngeal mirror can be used to explore the anterior wall. This, to my mind, is the only accurate and satisfactory method of operation in such cases; because it is not followed, and the cure attempted through an opening in the alveolus, I believe explains the many failures, and years of unsatisfactory treatment of antral disease. There are two or three matters of detail in the after-treatment of these cases that I think are of importance. I have not found the indefinite injection of solutions of silver salts of the slightest value. My best results have been by using a 1 per cent. carbolic in 4 per cent. boracic acid solution as an irrigant, for its anesthetic and cleansant effect—it is very grateful to the patient. The most effective application is nitrate of silver one drachm to the ounce applied thoroughly into every recess of the antrum, then irrigated with 2 per cent. salt solution twice daily. This application is made every third or fourth day until the pus secretion ceases. I usually pack the antrum daily for the first week, then insert a silver plug; this is not dispensed with until the antrum remains perfectly dry for ten days. The same general considerations apply to the frontal sinuses; instead of silver plugs I use a curved and fenestrated silver drainage tube. It is removed daily for irrigation and cleansing until the sinus is

completely filled with granulation tissue and obliterated, when it can be removed. If, however, no extensive degeneration of the lining membrane has taken place, the external wound can be closed at once and simple irrigation carried on through the nasal openings. Treatment of the empyema of the ethmoid cells and the sphenoidal antrum simply requires the thorough removal of the anterior and inferior walls, which is readily done, if the middle turbinate is completely removed. In this case there was nothing to indicate that the sphenoidal antrum was involved except the persistence of the occipital pain and a subjective odor to the patient, the latter having become apparent since opening the ethmoid cells.



The Ogston-Luc operation on the frontal sinus is the one made in this case, and the one I prefer, since I think it affords one a better opportunity for exploring both sinuses. There are a variety of methods of operating, that of Czerny, Jansen,

Kuhnt and others, but the Ogston-Luc probably meets the indications of most chronic cases. There are several points that are very interesting in this case. First: The number of sinuses involved and the long duration of the trouble. Second: The absence of discharge into the nasal cavities. Third: The absence of polypi within the nasal cavities. Fourth: The communication of one sinus with another, viz.: that the right frontal sinus discharged into the antrum, and I am rather of the opinion that the posterior ethmoid cells did also.

There are a variety of forms of accessory sinus disease, and I think Bosworth's classification covers best the cases one meets clinically. He divides them into five groups:

1. Where there is myxomatous degeneration without suppuration. In this class of cases there are no polyps, properly speaking, but a swelling of the mucus membrane of the middle turbinated, which is soft and has the characteristic color of myxomatous tissue. Such a condition is generally a prelude to polyps.

2. Extracellular myxomatous degeneration, with intracellular suppuration. This form succeeds the last mentioned. Besides the transformation of mucus membrane, there is a discharge of pus from the ethmoidal cells.

3. Purulent ethmoiditis with nasal polyps.

4. Intracellular polyps without suppuration. In an example of this type, the author found a middle turbinated enlarged to double its usual size. Removal of the bony layer of ethmoid revealed the presence of a gelatinous polypus.

5. Intracellular polypi complicated with suppuration. This seemed to represent a more advanced state of the last mentioned.

My case would seem to be well covered by the fourth group just passing over into the fifth. That is, there had been myxomatous degeneration of the lining membrane of all these sinuses with intracellular formation of polypi for several years, without suppuration, only recently passing over into necrosis of tissue and the production of pus, which had not yet become profuse enough to discharge.

One finds frequent reference to cases of closed ethmoidal empyema, but I have not been able to find any reference to a case such as I report, where all the sinuses could be regarded as in a state of closed empyema.

The Public Health and Marine Hospital Service reports three deaths from probable plague during the month of January. The last one was case 113. No infected rats have been found for some time, though numbers of them are caught and examined for pest infection.

It is said that there are now 29,200 doctors in Germany, the number having more than doubled since 1876; in the same period the population has increased only one-sixth.

OBSERVATIONS ON THE PROSTATE GLAND IN ITS RELATION TO GONORRHEA.*

By MARTIN KROTOSZYNER, M. D., San Francisco.

THE literature on this subject contains many contradictory statements as regards frequency, etiology, and pathological classification. Important points, especially in the prognosis and treatment of gonorrheal prostatic affections, are mooted and open to discussion. Therefore it appeared timely to the writer to review his own material and to compare his deductions and conclusions with those of others experienced in this field.

About ten years ago text-books uniformly dealt with two pathological processes of the prostate as sequels of gonorrhea—the prostatic abscess and the spontaneous appearance of prostatic juice at the meatus or prostaticorrhea.

Prostatitis, as a complication of a chronic gonorrheal urethritis was then practically unknown. Its coincidence was first established by Finger and Posner, who proved a coexisting prostatitis as diagnosticable by palpation of the gland per rectum and microscopic examination of its expressed juice. By these means the infection to the female genital apparatus in cases of an apparently cured chronic gonorrhea could be traced to the secretion of the diseased prostate pressed out at the moment of ejaculation. The anatomic basis for Posner's investigations was furnished by Finger, who in a number of cadavers of men, in which ante mortem a chronic urethritis was observed, found the prostate gland to be the seat of periglandular as well as endoglandular infiltrations. Particularly important was the fact that in a large percentage of cases examined an obstruction of the ejaculatory ducts by invasion of round-cells was found as a proof of retained inflammatory and infectious material that at any provocation, especially in cohabitation, could be thrown to the surface.

In the majority of instances it is unfortunately impossible to ascertain the onset of gonorrheal prostatitis, no characteristic or pathognomonic symptom pointing to the invasion of the prostate. The diagnosis of a coexisting prostatitis in gonorrheal urethritis cannot be made through clinical observations, but must be established by palpation of the prostate and macro- and microscopic examination of its secretion. Again and again one will be confronted with cases where no symptoms, or very vague symptoms, difficult in their interpretation in connection with any particular organ of the genito-urinary tract, are present, and where the palpatory evidence of the gland and careful examination of the juice will demonstrate pathological material of appalling gravity.

* Read before the San Francisco County Medical Society.

Statements of various authors differ materially as regards the frequency of prostatitis in gonorrhea. Some regard every gonorrhea invading the posterior urethra as coinciding with involvement of the gland. In this connection Frank's and Bierhoff's reports deserve mention. The former found in 210 and the latter in 151 cases of posterior urethritis, the prostate involved in 100 per cent, while Colombini and Goldberg only found between 30 and 50 per cent in their material. In my cases I have not because in many cases with a profuse urethral discharge it was impossible to obtain prostatic fluid that was not mixed with secretion from the urethra, and also because it included many chronic and tenacious cases of posterior gonorrhea where inflammatory conditions of the deeper appendages of the urethra may have existed previous to my observation. I am, though, justified in stating that in at least 50 per cent of my cases an involvement of the prostate was diagnosticable. In only a small number of my patients a feeling of fullness in the prostatic region was complained of, while other subjective symptoms (tenesmus, frequent painful micturation, spasmodic pains at the end of urination or appearance of blood or pus at the end of micturation) seemed to depend upon the condition of the urethra and the intensity of the inflammatory process in the prostate, either in its totality or in some part of it. As all these symptoms in the majority of cases were absent, the diagnosis was only made possible by palpation and examination of prostatic fluid.

Palpation revealed varying results as to the form, size and consistency of the gland. The prostate is found to be large, of medium or small size. We are still lacking a trustworthy method that enables us to exactly measure the gland. The gland may be either hard or soft and the difference in consistency may extend over the whole organ, or only a limited portion. Between the hard knots one often feels soft doughy places; rarely is palpation of the gland painful to the patient. Repeatedly the gland appeared fairly normal upon palpation, while the macro- and microscopical examination of the expressed juice prove the evidence of diseased foci. Rarely only a gland that appeared involved upon palpation did not reveal further pathological material through examination of its secretion. In those cases, as a rule, little or no secretion was obtainable, because it either remained in the posterior urethra, between the two sphincters, or it was found afterward in the bladder. For these cases the method that I published ten years ago proved diagnostically valuable: Let the patient urinate at first in 2 glasses, keeping a portion of urine in his bladder. As a rule these first two portions appear to be almost void of shreds, pus, etc. Then the prostate is pressed out and imme-

diately afterward the last portion of urine is voided, which will be found cloudy and turbid, containing abundant material of an infectious character. It must, though, not be forgotten that after ejaculations, pollutions, or where through periglandular infiltration an obstruction within or outside the ducts is present, no or very scanty prostatic secretion is obtainable. If the secretion in such cases is merely furnished by a healthy acini, no pathological data, macro- or microscopically, will be ascertained. These are rare exceptions and upon further observation will soon be diagnostically cleared up.

The macroscopic features of the expressed fluid are differently described by various authors. I agree with Goldberg, who points out as most characteristic of the diseased fluid its not being homogenous in its aspect. We do not see when drop after drop falls upon the object-cover an equally fine emulsion, but rather a conglomeration of unequal corpuscular elements of different consistency. In other words, while the normal gland secretes a milk-like secretion, the diseased one furnishes a fluid similar to that of turbid, floccular water.

It is erroneous to assume that a gland apparently normal upon palpation will always secrete fairly normal macroscopical fluid, because not rarely from such apparently healthy glands an abundant milk-like gelatinous secretion is expressed, that microscopically shows all evidences of infectious material.

Microscopically the most important findings are given in the appearance of pus cells in abundance. The presence of clumps of round cells is particularly noteworthy and is justly considered the most important evidence of an existing prostatic involvement. Spencer and myself found some round cells in normal prostates in individuals with no gonorrheal history, in one case even blood corpuscles and pus cells more numerous than usual in a young man with a normal prostate expressed the morning after venereal excess, but we never found these characteristic clumps of pus cells that are pathognostic for an existing prostatitis. Increase in epithelial cells is considered by some authors as a pathological symptom. I have found this symptom missing in quite a number of my slides. Absence or decrease of fat globules is certainly in my experience of diagnostic value. Since in the healthy gland fat is always found in abundance, its absence or decrease must necessarily be interpreted as a pathological phenomenon. Gonococci are not easily demonstrated in prostatic fluid. The first six months after the onset of the infection they may be found, and even at this period one has to search several slides before a solitary or a few pairs of unmistakable gonococci—with the aid of Gram's method—are recognized. Later they are very rarely

to be seen. I agree with Goldberg, who claims that gonococci in the prostate perish after a certain period. Whoever has devoted time and pains to staining specimens of prostatic fluid will admit that he never saw the abundance of intracellular specific diplococci as noticeable in urethral secretion. Often the form and staining quality of microorganisms are such that a correct diagnosis, to say the least, is doubtful.

The statement of many authors that autoreinfection quite generally occurs from hidden foci in the prostate can only be accepted for those rare cases where a coexisting urethritis can be excluded, which in reality was present in the majority of my observations. In cases, for instance, where anamnestically repeated gonorrheal infections could be ascertained, it seems doubtful whether reinfection was due to old foci or to a fresh involvement of the prostate. Wherever recurrent urethral catarrhs with gonococci are rapidly cured by prostatic massage with consecutive irrigations of the whole urethral canal without a catheter, we must assume the infectious material to be deposited in the more superficial parts of the prostatic ducts. Every experienced urologist knows that whenever the glandular tissue of the prostate is once invaded by infectious material, a successful treatment is very tedious and a cure a matter of grave doubt. In time the gonococci will disappear, but the other microscopic findings of pathologic note remain stationary, especially clumps or nests of round cells will appear on slides taken from patients who have been treated for years. Further observations taught me that these prostates cease to be infectious in time. I therefore don't share Finger's radical view, who refuses permission to marry to his patients who, after a chronic posterior urethritis, do not show normal prostatic juice on microscopical examination, i. e., no pus cells nor gonococci. If, after repeated examinations, I do not find gonococci, I do not object to matrimony, even if the slides show abundant round cells; results prove my procedure to be correct.

Neurasthenia is often a sequel of gonorrheal prostatitis; a fact not sufficiently appreciated in its far reaching consequences by the general practitioner. A conservative estimate proves about 20 per cent to 30 per cent of all cases to be future neurasthenics. Frequently the nervous affection is based upon temporary impotence. Vecki, in his excellent monograph on sexual impotence, points to the frequent coincidence of temporary impotence with chronic gonorrhea, but, to my mind, does not sufficiently accentuate the frequency of decrease in sexual power observed in chronic gonorrheal prostatitis. Here gratifying results may be obtained by a rational local and general therapy.

Goldberg has lately attempted to classify the different forms of chronic gonorrheal prostatitis, but I fear the acceptance of his classification will be marred by its being too numerous and complicated. Clinically, I differentiate between a total parenchymatous prostatitis and the prostatic abscess (where the gland is invaded in its totality) and a partial or follicular form (where only parts of the gland are diseased). It seems also proper to divide between a prostatitis with and that without a coexisting urethritis. Symptomatically, I have found two large groups predominate, viz.: Latent chronic prostatitis with subjective symptoms of various character (polla kiuria, imperious or spasmodic tenesmus, etc.) and that form of prostatitis as observed in sexual neurasthenics. This classification is still lacking in simplicity, although the rare forms of gonorrheal prostatitis are purposely not included.

The treatment can only produce good results if based upon an exact diagnosis and carried out by a tactful and experienced physician. We must, as Leyden teaches, bear in mind not to treat the disease only, but the individual patient. The prostate being a most important sexual organ, it is apparent that any of its pathological affections will be complicated with grave nervous manifestations.

Active treatment of the prostate should be delayed until acute inflammatory conditions have abated. Much, though, can be done during this period by rational internal and hydropathic treatment (salol, diuretics, prolonged hot sitz-baths).

In local therapy massage still occupies the first place, and if done carefully at the right time, and at correct intervals, according to the symptoms of each individual, it certainly is a powerful remedy, though I am under the impression that this procedure is often carried out without strict indications. This indication is generally present whenever infectious and stagnating secretions are retained in the prostate, which could not or would not be evacuated spontaneously. Guépin warns against the promiscuous application of massage, as fraught with deleterious results if done without delicacy and on strict indications, and I cannot add anything new to the technique of massage which has been repeatedly described in recent publications on the subject. No instrument can or should replace the finger in massaging the prostate, as its touch is indispensable in gauging the intensity of the procedure for hard knots or soft spots; for large succulent glands that squirt out abundant watery discharge on slight pressure, or for hard fibroid organs that will hardly yield a drop to a rather forcible massage carried over several minutes. How to massage, when, how long and at what intervals are points that are only learned with growing experience.

In cases with a coexisting urethritis, massage is followed by irrigation of the total urethra with a nitrate of silver solution 1-600 to 1-500. Whenever a urethritis is present with infiltrated areas in the canal, massage is followed by dilatation of the urethra; in the beginning with steel sounds and later with Kollmann's dilators with rubber coat. The whole urethra is afterwards either irrigated or to circumscribed infiltrated areas of the posterior urethra instillations of nitrate of silver are made, one-half to 6 per cent. Lately I have used for most obstinate cases Kollmann's irrigation dilators and am more satisfied with my results. In spite of what is claimed for the efficacy of new silver salts I have had the best success with nitrate of silver.

In acute and subacute forms of prostatitis I can advocate local applications of hot water through Artzberger's instrument; for chronic forms with nervous manifestations the double-channelled instrument should be used that permits the application of hot and cold water and its repeated change at the same sitting. Suppositories containing an astringent (ichthyol) or a resorbent (iodid of potash) drug are generally quickly absorbed by the rectum and in my experience without value; medicated clysmas for the same purpose are not borne well by the patient, but deserve to be tried in tenacious cases.

For local application of electricity, I use an electrode as indicated by Vertuhn, which represents a slight modification of an ordinary button electrode. The other padded electrode is placed upon the perineum. I generally apply mild faradization and never longer than two to five minutes.

Most important is the general roborative and especially the psychical treatment of neurasthenic symptoms. Here the physician's tact and experience have to decide whether a local treatment will be beneficial or harmful to the patient, who, in his nervous, or rather hypochondriacal state, is prone to overestimate the pathological importance of slight local symptoms, as for instance, the appearance of a morning drop. Many patients have been converted into confirmed sexual neurasthenics by local overtreatment, while on the other hand, a careful local treatment and removal of slight symptoms may have an excellent influence on the patient's general nervous system.

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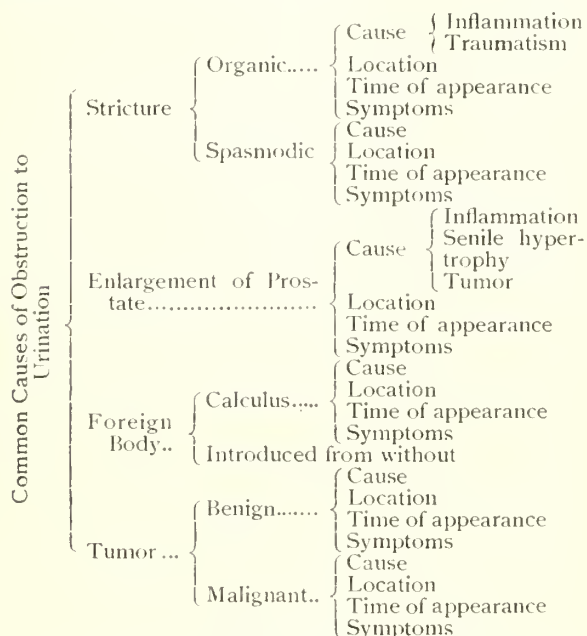
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Dr. C. A. Poage, secretary of the Mendocino County Medical Society, has moved from Hopland and has located at Colusa.

CONTRACTURE OF THE VESICAL NECK*

By R. L. RIGDON, M. D., Chief of Genito-Urinary Clinic, Cooper Medical College.

THE regular and proper performance of the urinary act is so important to the well-being of the individual that any interference with it at once demands attention. There are many causes operating to bring about urinary disturbance, but in this paper we consider but one, that of obstruction, and this question is itself restricted to very narrow limits. Obstruction may exist at any point within the urethra, or may be situated within the bladder at the internal meatus. The accompanying diagram gives the more common forms:



This classification, while by no means complete, serves as a working basis for clinical purposes, and most cases can be assigned to one or the other heading. It was the working scheme adopted by the writer in investigating appropriate cases, and for a time was fairly satisfactory. Gradually it became more and more difficult to make all cases accord with this scheme because of seeming contradictions in history, symptoms and findings. A young man who denied venereal history or injury would present himself with symptoms of urinary disorder, and upon examination the membranous and spongy urethra would be found free from stricture. Some obstruction might be felt in the prostatic urethra, but rectal examination would show the prostate not enlarged, and besides, the man's age precluded hypertrophy. Clearly this case could not be grouped in the foregoing classification. Another patient would be a man of middle age whose symptoms pointed to bladder stone. Interruption of the stream would be marked and terminal pain felt beneath the glans

* Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

penis and at the bladder neck. Careful examination would fail to reveal the presence of a calculus nor could stricture of the urethra be made out. A full-sized bulb would meet with some obstruction at the bladder neck, but a large steel sound would pass with ease. No rectal evidence of prostatic hypertrophy could be found and the cystoscopic examination would be negative. Again would we find difficulty in classifying this case. Another patient would complain of frequent urination both by day and night, and careful investigation would fail to reveal any adequate cause. To this symptom might be added various neuralgic phenomena in related organs, such as pain felt about the rectum or radiating down the thigh, etc. As such irregular cases accumulated, it became more and more apparent there was some general cause operating to produce urinary disturbance which by the writer was not fully appreciated.

A number of years ago I adopted the method of perineal drainage in dealing with stricture within the bulbous urethra, and thus had rather frequent opportunity to make digital exploration of the deep urethra. In a number of instances it was noted that the finger met with decided resistance in its advance toward the bladder, and this, too, when the prostate was normal in size. There appeared to be a contracture of the urethra at the bladder neck, sometimes well defined, sometimes not so pronounced. As experience increased it became certain that this contracture was a positive entity and not the delusion of an uneducated finger, and a little further observation led me to the conclusion that I had now found the anatomical cause for the irregular urinary symptoms in some of my patients. Occasionally articles would appear in the journals indicating that other surgeons were meeting similar conditions. Eugene Fuller of New York reported a number of cases and referred to investigations and reports of French surgeons of a generation ago. His report was followed by others, until now this unclassified group is becoming well recognized. So far as I know, this subject up to the present time has not been discussed by this society.

No better name for the condition has been suggested than that of "Contracture of the vesical neck," which was the designation adopted by the early French writers. The histological changes have not been fully worked out, since so few opportunities for post mortem investigation are presented. It is evident there is a development of organic elements about the bladder neck to which, under some circumstances, may be added muscular spasm. Chetwood in a recent article speaks of it as a fibroid infiltration of the glandular and muscular tissues surrounding the bladder neck, while Fuller characterizes it as a chronic contracture of the prostatic fibers encircling the vesical

orifice, permanent, rigid and unrelaxable under an anesthetic.

Cause. The cause seems to be chronic congestion of the prostate. Inasmuch as congestion may be brought about in many ways, it follows that this condition of fibroid contraction may be found in individuals with widely differing histories. In one there may be a history of overindulgence in sexual pleasures either natural or unnatural, while in another the sexual passion has been as rigidly controlled as possible. One patient will give a history of alcoholic indulgence and another of abstinence, but in all there will be found some cause operating to produce chronic prostatic congestion.

Symptoms. In my experience the prominent symptom is frequency of urination, both diurnal and nocturnal, and with this is usually associated pain slight or severe. The pain is terminal in character and if the stream is interrupted, which sometimes occurs, the symptom complex or vesical calculus is closely simulated. If the frequency of urination is great, congestion of the bladder results and perhaps infection may follow, in which event the symptoms of cystitis will be present.

Treatment. The treatment is both general and local. Sexual hygiene must be enforced, the urine must be rendered and maintained unirritating, and measures must be adopted to relieve the prostatic congestion and hyperesthesia. Hepatic stimulants may be needed, the bowels must be regulated when necessary. Rectal douches and massage of the prostate are useful, and instillation of nitrate of silver or other solutions into the prostatic urethra may be tried. When the condition is well advanced, operative measures must be resorted to. Overstretching of the prostatic urethra by means of appropriate dilators can be tried, but gives only temporary relief. Division of the contraction, radical and thorough, is undoubtedly best. Up to the present time I have used the knife in making this division, but since reading the article by Chetwood dealing with this subject, I am of the opinion that the best results will be obtained by dividing the offending fibers by means of a modified Bottini instrument introduced through a perineal opening. The following illustrative cases are reported:

Mr. G, Age 40, single, occupation carpenter. Denies venereal history. Was a steady drinker, but not to excess. Perfectly well until September, 1901, when he became much overheated while trying to extinguish a fire. Was suddenly seized with pains in back and after a few days urinary disturbance came on. Desire to urinate was very frequent and the act was attended with considerable pain. At first there was no trouble in starting the stream, but later it would sometimes start with difficulty and the stream was interrupted. He had never passed a stone or gravel, but occasionally some blood would show in the urine. His bladder was irrigated for a time with some relief, but after a few weeks the symptoms regained their

former intensity. He consulted me in November, 1902. At that time he was considerably emaciated, his general appearance being that of a man in great suffering. He was urinating every few minutes and at each act suffered severe pain, which was referred to the under surface of the glans penis. The stream was interrupted. His suffering was so pronounced that he had been taking large doses of morphin in an effort to obtain relief. At the examination his urethra was exquisitely sensitive and a general anesthetic had to be employed. Normal caliber of urethra was 35 F, meatus 25 F, which entered to vesical neck. Number 20 F, steel sound, was passed into the bladder with some difficulty. No vesical calculus could be felt with the stone searcher, but upon introducing the instrument the sensation of a prostatic stone was imparted to the hand. The prostate was not enlarged. Urine contained much pus, some blood and albumen. No kidney elements could be found. Diagnosis: Probable prostatic calculus. Operation advised.

The usual perineal incision was made and the prostate carefully explored. No calculus could be felt nor any deposit of salts within the canal. No bladder stone. The prostatic urethra immediately adjoining the bladder, in other words, the vesical neck, was found narrowed to the size of a Number 20 F. With a bistury this was incised on the floor of the canal until no obstruction remained. The bladder was washed out and perineal drainage established through a large rubber tube. The presence of the tube caused so much distress that it had to be removed at the end of twenty-four hours. All pain then ceased and the patient progressed to an uneventful recovery. Steel sounds were introduced at intervals until the man returned to his home about the middle of December. His frequent urination had ceased and the pain had disappeared. I heard from him several months later and he was then well.

H. M., single, age 39. Denies venereal history. Perfectly well until November, 1901. Then noticed frequent desire to urinate accompanied with pain. The onset was sudden. Soon the stream was diminished in size and force and there was hesitation in starting. He began the use of the catheter during the winter and irrigated the bladder, but without relief. The introduction of steel sounds was tried with negative results. He had never passed blood or gravel. He continued in much the same condition until July, 1902, when he consulted me. At that time he was urinating every hour and the act was accomplished only after much straining. Normal caliber 35 F, meatus 30; (entered the prostatic urethra, but there was stopped). Number 25 passed into the bladder. A soft rubber catheter could not be introduced, but with a silver catheter about twelve ounces of urine was withdrawn. The prostate per rectum was smooth, not enlarged, not sensitive. Seminal vesicles were perhaps slightly thickened. Examination of the urine showed much pus, slight albumen, few blood cells, no casts or other kidney elements. Cystoscopic examination was not made at this time. Diagnosis: Intravesical growth occluding the urethral orifice. Operation was recommended.

The usual median perineal incision was made into the membranous urethra. Exploration of the prostate revealed a marked and rigid contraction of the bladder neck, which was relieved by liberal incision. No stone or vesical tumor was present. Perineal drainage was established and the usual after treatment of perineal cases was followed. The wound healed slowly, a small fistula remaining for several months, but this eventually closed. The frequency of urination was much diminished, the patient having to arise once at night, and the pain was entirely relieved. A peculiarity in this case was the condition

of the musculature of the bladder. Almost complete paresis had followed the repeated overdilations and in spite of the fact that the obstruction had been removed, the use of a catheter was necessary to empty the bladder. The bladder has gradually regained power until at the present time the larger portion of the urine can be passed voluntarily. When necessary to use it, the rubber catheter can be introduced without difficulty.

January, 1902. A. J., age 45, single. Denies venereal history. Eight years ago began having frequent and painful urination, which has continued to the present time. Cause unknown. Arises once or twice at night. Chief symptom is a burning, heavy pain, or as the patient describes it, a great distress about the neck of the bladder. The pain radiates to the rectum and is sometimes felt about the thighs. Not fully relieved by urination. The pain, while not constant, is present the greater part of the time. He has been subjected to various forms of treatment, injections, sounds, bladder washing, etc. When he consulted me I was in doubt as to the nature of the trouble. The urethra seemed normal in size and the endoscope showed nothing abnormal. The bladder examinations were negative. The prostate was smooth, not enlarged and not unduly sensitive. Urine normal in action, no albumen, no sugar, no kidney elements. Diagnosis: "Neuralgia of prostate and hypochondria". He was treated for several months without benefit and finally as a last resort drainage of the bladder was proposed, to which the patient consented, rather to my surprise. A median perineal incision was made into the membranous urethra. A decided contracting band was found in the prostatic urethra, which was overstretched by means of wide-bladed forceps. A careful exploration of the bladder showed this viscus normal. Perineal drainage was maintained for a few days, and then the wound was permitted to heal. All distressing urinary symptoms disappeared and the patient felt that he was well. However, after a few months the old pain began to return and soon was almost as distressing as before the operation. This return I attribute to the fact that I did not completely divide the obstruction at the time of the operation.

GASTRIC ULCER.*

By E. C. DUNN, M. D.

IN presenting this subject for your consideration tonight, it is not with the hope of promulgating anything new as to diagnosis or treatment, but rather with the thought that gastric ulcer is much more frequent than recognized, and therefore is probably more often overlooked than any other affection.

I find in an excerpt from an article on this subject presented to the American Medical Association the following statement: "Five per cent. of all hospital cases suffer from this disease. In ordinary life gastric ulcer may not be so frequent, but there is no doubt that many apparently healthy persons or sufferers from obscure stomach symptoms are really carrying around latent gastric ulcer."

If this statement is true it will certainly not be amiss for us to spend this evening in the consideration and discussion of so important a subject. That gastric ulcer is one of those diseases which have been well thrashed over in medicine,

* Read before the Fresno County Medical Society.

I know; but sometimes these are not always the best understood and the clearest subjects in medical literature.

In passing, allow me to say, while the surgical part of this subject is not within the province of this paper, the surgery for gastric ulcer and its results is very extensive and is demanding more and more attention every day.

I find the following in an article on stomach surgery, read before the American Medical Association: "We have learned that the fears and apprehensions of excessive danger that so long detained our surgical endeavors in the upper half of the abdomen were greatly exaggerated, and that the surgery of this part of the peritoneal cavity is not attended by unusual risks if we choose an opportune time for operating, while the morbid process is yet circumscribed and before the recuperative and reparative powers of the patient are exhausted. Indeed, it has been shown that the stomach will bear almost any kind of surgery with comparative safety to the patient, if the operator is clean, the patient is in good condition, and the small intestines are not unnecessarily exposed or subjected to trauma."

Etiology: The etiology of most cases of gastric ulcer is obscure. Usually there is more than one causative factor. Some predisposing conditions are: Disturbances in the vascular supply of the stomach, injury to wall of stomach, deterioration in the general health, diminished alkalinity of the blood, and long pre-existing hyperchlorhydria.

Only one thing in etiology is thoroughly agreed upon—that anemic conditions, and especially chlorosis, form the basic predisposition to the affection.

Diagnosis: The diagnosis in a typical case is usually not a matter of difficulty. The localized pain, made more manifest by pressure, accompanying emaciation and usually some chlor-anemia, makes ulcer probable, even where no hemorrhage from stomach or through bowels is manifest. If carcinoma can be excluded, either hematemesis or hemorrhage through bowels, from stomach, or both, with the characteristic localized pain, leaves little doubt of ulcer. Some authorities believe that the tender point in the back is of the utmost importance in the diagnosis of gastric ulcer, and that it is frequently found in that affection. In the differential diagnosis of gastric ulcer from cancer, the presence of free hydrochloric acid where no tumor can be discovered, speaks for ulcer, while the failure to find free hydrochloric acid is against the diagnosis of ulcer.

Treatment: The main object of your treatment is, of course, to heal the ulcerated surface. This is accomplished by giving the stomach as near absolute rest as possible, and in this way lessen the organ's motor and secretory functions, but at the same time

you must maintain the bodily nutrition. Healing is favored additionally by a neutralization of the gastric secretion with appropriate antacids and by the employment of remedies exerting a soothing action on the ulcerated surface and upon the hypersensitive mucous membrane.

An absolute milk diet has been the treatment advocated in these cases for years past; but we believe at this day we can improve on this. The first and most important thing recommended is to send your patient to bed for a period of from ten days to three or four weeks, according to the indications present; then all food by the mouth interdicted. Fluids, except sufficient water for the administration of the medicines taken, should be withheld.

The best of the remedies advised are: bismuth subait., bismuth sub-gallate, argentum nitrate, olive oil, albuminate of iron, nutrient enema and stomach lavage with some bland non-toxic antiseptic fluid. Lavage, however, should be used with great caution, especially where hematemesis is manifest.

The treatment indicated above is that recommended by the different authorities. My treatment, in the main, has been as follows: To put my patient to bed at once from one to four or more weeks, according to indications. Stop everything by mouth except medicine and water needed, if any, to administer. For medicine I now rely mainly on emulsion petroleum with the hypophosphites. If thirst is prominent, small pellets of ice in the mouth, but I control principally with warm saline water enemas. Then feed your patient with nutrient colon enema. For this you can use somatose, egg, beef jelly in combination, or peptonized milk-gruel. But this nutriment must be ready for immediate assimilation. You must add papain or caroid to digest the egg and use diastase to digest the gruel if not peptonized. The enema is better tolerated in the colon than rectum, and absorption is more rapid there. If iron is indicated you can add the albuminate in ½-ounce doses to your enema. These nutrient enemas should be given every six or eight hours, and it is preferable at least twice daily to precede them an hour with a warm saline water enema.

After your patient has become well enough to begin some nourishment by stomach, I have found it well to bear in mind the rules as laid down by Hare in his *Practical Therapeutics*:

(1) "We must avoid all food that can either mechanically or chemically irritate the surface of the ulcer.

(2) "Avoid the use of food that is calculated to stimulate the acid secretions of the stomach.

(3) "Avoid distending the stomach with much food at a time, for by maintaining the stomach in a contracted state, its mucous membrane is thrown into folds, so that the margins of the ulcer are relaxed, and its extent diminished—

conditions favorable to the filling up and healing of the ulcer.

(4) "Any excitement of the muscular movements of the stomach should be, so far as possible, prevented."

I have found malted milk to be an excellent food in this stage. Peptonized milk and peptonized milk-gruel are also useful for a change. As your patient gains you can vary and add to this dietetic treatment until he is on a full and ordinary diet. However, even at this stage it must be borne in mind that gastric ulcer patients as a rule are hyperchlorhydric and cannot follow the diet of ordinary people—therefore, should be warned not to eat greasy or highly seasoned food; should have food cooked well-done, avoid condiments and masticate thoroughly and slowly.

A word as to the prophylaxis of gastric ulcer in certain conditions, combined with certain occupations. I find the following under "Practical Hints" in the *International Clinics*: "Attention has recently been called to the fact that gastric ulcer develops with special frequency in certain occupations, and that anemic individuals who follow these occupations should be warned of the special danger involved. Anemic cooks, for instance, should be warned of the danger of tasting very hot food; anemic seamstresses warned not to lean against their machines, especially when in vibration, because there seems no doubt that through thin abdominal walls an anemic mucous membrane may, under these conditions, suffer from a sort of decubital ulcer. This is also true for factory operatives. Shop-girls, bookkeepers and typewriters should be warned not to lean against counters and desks, for nearly the same reason."

It is only necessary to name the results of long-continued ulcer, where hemorrhage or perforation has not supervened to cause a fatal termination or a resort to surgical interference, as the treatment of these sequella is naturally surgical. The most common result is pyloric obstruction, which is frequently followed by gastric dilatation and gastric stagnation. Adhesions of the stomach to a neighboring organ, or to the abdominal wall, is another result of gastric ulcer, and may occasion symptoms quite as distressing as those due to pyloric stenosis.

Before closing, I wish to mention the indications for operation in gastric ulcer. In an article on abdominal surgery, I find the following: "The question of operation for ulcer of the stomach has been widely discussed during the past year, and the consensus of opinion seems to be that in ordinary cases no operation should be performed until all medical means have been exhausted. But in the case of perforation or hemorrhage, operation should be immediately resorted to."

LAPAROTOMY—REPORT OF AN OPERATION.*

W. B. CUNNANE, M. D.

APRIL 25, 1903, I was called to see Mrs. R., on arrival I found her in labor; the pains were occurring regularly at intervals of about ten minutes. She gave a history of seven pregnancies at full term without any complications; present pregnancy normal, except that she seemed to be larger than usual. White female; native of California; age 36 years; Albino. On inspection abdomen seemed quite large and of irregular contour. On examination found uterus containing fetus on the left side, and a fluctuating tumor of considerable size occupying the right side and extending upwards into the right hypochondriac region. After making the examination, I explained to her husband and mother the condition of affairs, but refrained from mentioning it to her lest she should become unduly alarmed. On account of the position of the tumor the labor progressed normally, and she was delivered of a nine-pound boy about 3 p. m. The placenta came away about ten minutes after delivery, and the uterus contracted normally. The lying-in period was normal in every particular. I told her about the tumor the tenth day, and suggested the advisability of an operation at the termination of the sixth week. At first she consented, but later declined, thinking it might disappear without operative interference.

October 18th I saw her again and found the abdomen much larger than it should have been at the termination of pregnancy. The skin was stretched as tight as a drum, the swelling extending to the ensiform cartilage, and she was perfectly helpless. She complained of a great deal of pain over the abdomen and a crampy sensation of the heart. She realized the seriousness of her condition and readily consented to go to the Cottage Hospital for the purpose of an operation.

October 24th, with the assistance of Drs. Blake, Spaulding and Stoddard, I did a laparotomy, removing about thirty-five pounds of tumors. The first incision was about four inches long, in the median line, extending from the umbilicus downward. The abdominal and cyst walls were so firmly bound together by adhesions and so thin that the knife passed imperceptibly through both, permitting the contents of the latter to escape. It contained about twenty-four pounds of a substance which bore a striking resemblance to a mixture of brown bread and milk. The cyst was so closely adherent to the abdominal walls that its removal was very tedious and difficult. After its removal there was considerable hemorrhage, which was controlled by compression forceps and hot sponges. The second cyst was small and

(Continued on Page 98.)

* Read before the Santa Barbara County Medical Society.

MEDICAL SOCIETY MEETINGS.

Alameda County.

At the last regular meeting of the Alameda County Medical Association the following was passed:

Resolved, That we approve of the action of the Board of Trustees of the State Society and of the Publication Committee of the CALIFORNIA STATE JOURNAL OF MEDICINE in excluding from the pages of the JOURNAL all advertisements of secret medicines; and that we furthermore approve of their decision that all pharmaceutical preparations, of which information not only as to the active ingredients but also the quantities or proportions thereof are withheld, are to be regarded, and are in fact, secret remedies.

Resolved, That a copy of this resolution be forwarded by the secretary to the CALIFORNIA STATE JOURNAL OF MEDICINE.

Approved by the society.

A. H. PRATT, Secretary.

The Alameda County Medical Association met Tuesday evening, February 9th, Dr. Hamlin presiding. Dr. J. F. Rinehart read the first paper, in which he related the following very interesting and remarkable history of a case of hydatid cyst that had come under his notice:

"Mrs. D., age 43, American by birth, had lived in Australia for ten years, during which time she had become interested in blooded dogs and cats. From Australia she moved to Chili, taking a number of her animals with her.

"Her family and past history were negative; she had never been sick before the present illness began. In 1886 she noticed that a lump was growing in her right side just below the ribs, and began to experience some pain in that situation. Soon after noticing this she made a trip to Germany, where she consulted a surgeon, who aspirated the growth and obtained about 500 cc. of a thin watery fluid. For fourteen years she was perfectly well. In 1900, during convalescence from typhoid fever, she began to experience pain in the side, and the tumor again appeared. A diagnosis of gall stones was made and an operation performed, but no gall stones found. Drainage was established for a month before the wound was allowed to close. Three months afterwards the tumor began to form again, and the patient decided to perform her own operation. Armed with a lancet and cocaine solution, she made an incision through the old scar and emptied the cyst. The wound healed in a few days. A short time after this she started for San Francisco with her son, and while on board ship the tumor again made its appearance and caused her considerable annoyance. She repeated the previous process and liberated the fluid.

"On August 7, 1901, her son called me about 4 a. m., telling me to bring with me a knife and cocaine solution. On reaching the house I found her in extreme pain. She briefly outlined her trouble and insisted that the cyst be tapped at once. This I refused to do, but gave her .03 grams morphia subcutaneously and persuaded her to go to the hospital at once. The ambulance reached the house about four hours afterwards, but we were too late. The effects of the morphia had passed off, the pain returned, and the patient had boldly opened the tumor again. A thin, watery fluid was slowly discharging from the wound.

"Her technique was rather interesting as indicating her knowledge of asepsis, for she carefully scrubbed her hands and the site of the operation and then applied alcohol. She sterilized her scalpel by immersion in alcohol and by heat from a flame.

"On October 10th she again opened the cyst and sent me a sample of the fluid obtained.

"The physical examination of the patient was negative, with the exception of the tumor of the liver.

"Examination of the cystic fluid showed it to be thin and watery, alkaline in reaction, sp. gr. 1008, containing no albumen and no sugar. It had no power of digesting albumen. No hooklets were found in the first specimen, but they were quite numerous in the second."

During the discussion, Dr. Milton said that he had seen two cases of hydatids, both of which were in men who had lived some time in Alaska and had been associated more or less with dogs during that time.

Dr. Stirling stated that this disease was rather common in India, and that she had seen about thirty cases while she was a medical missionary in that country. She had had the opportunity of operating on several, and had observed that the injection of bile into the cyst had the effect of killing the parasites.

The second paper was read by Dr. H. M. Pond on the subject of "Abortion." The doctor discussed the sociological and moral side of the question. He mentioned the marked aversion to maternity on the part of the women of today, especially among the better classes, attributing this aversion, in large measure, to the development of club interest among women, and their increasing attention to general and civic affairs. He reviewed many of the methods resorted to by women to bring about abortion after they had failed to get helped out by the family physician, and brought up the ethical side of the position of the family physician on this question.

J. M. SHANNON,

A. S. KELLY,

Publication Committee.

Contra Costa County.

At the last meeting of the Contra Costa County Medical Society a resolution was suggested by Dr. J. T. Brenneman of Martinez, and president of the society, as follows:

That hereafter all examinations for old-line life insurance companies shall be a minimum fee of five dollars (\$5.00).

After it was discussed thoroughly by Drs. Blake, Neff, Key, Abbott and Brown, Dr. Blake then made the following motion, which was adopted unanimously:

That a straight fee of five dollars (\$5.00) be the minimum charge of the members of this society, and that the secretary be instructed to correspond with the secretaries of the various counties, as also the secretary of the State Medical Society, asking the hearty co-operation of all the societies with us in this matter.

J. S. RILEY, Secretary.

Humboldt County.

The regular meeting of the Humboldt County Medical Society was held in Eureka, Tuesday evening, February 9th, Dr. Felt presiding. The Dental Society of Humboldt County requested that the medical society appoint a committee to meet with a similar committee from the dental society for the purpose of considering matters pertaining to the welfare of both professions in the county. It was decided to comply with the request, and Drs. C. O. Falk, S. L. Loofbourrow and W. H. Wallace were appointed to represent the medical society.

The March meeting being the annual meeting of the society, it was decided to have a banquet, and the refreshment committee was instructed to prepare for it.

Clinical cases were reported by several of the members. Papers were read by Dr. F. O. Pryor of Scotia and Dr. H. J. Ring of Ferndale.

G. N. DRYSDALE, Secretary.

Merced County.

The regular meeting of the Merced County Medical Society was held on February 4th.

A paper entitled "Antipyretic Drugs: Their Use and Abuse," was read by Dr. A. M. Smith. The paper excited considerable discussion. The author maintained that the so-called antipyretic drugs, such as the coal-tar products, are almost never required for that purpose, water and those drugs that stimulate the excretory functions being the true antipyretics. Some of the physicians present did not concur in those views, claiming that they had obtained excellent results in certain cases with the antipyretic drugs without deleterious effects.

Following the discussion Dr. A. M. Smith and Dr. W. E. Lilley were elected as delegate and alternate to the annual meeting of the State Society to be held at Paso Robles in April.

W. E. LILLEY, Secretary.

Placer County.

The Placer County Medical Society met in regular session on February 6th. Owing to the inclemency of the weather, the attendance was not large, but seven members being present. The meeting, however, was pleasant and harmonious, and very interesting; the president, Dr. Bulson, in the chair.

One year ago the society was formed by a re-organization of the old Placer County Society, in accordance with the laws of the State Society. The membership included all but two of the regular profession within the county. During the past year two of its members left the jurisdiction, and two new men came in their places; one of these came into membership at this meeting.

The election of new officers resulted as follows: President, Thomas M. Todd, M. D., East Auburn; vice-president, J. Francis White, M. D., Auburn; secretary, R. F. Rooney, M. D., Auburn; treasurer, Geo. H. Fay, M. D., East Auburn; legislative delegate, Charles H. Bulson, M. D.; alternate, A. H. Tickell, M. D.

Dr. G. H. Fay was nominated for appointment as a member of the National Legislative Committee of the A. M. A., and Dr. R. F. Rooney was appointed delegate to the American Congress on Tuberculosis.

New members elected: Dr. J. T. Jones, Dr. A. H. Tickell, Dr. C. L. Muller, all of Nevada county, and Dr. L. A. Harcourt and Dr. O. L. Barton of our own county.

R. F. ROONEY, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. McKee on January 26th.

The meeting was called to order by the president, Dr. Ross, and the following members responded to roll call: Drs. Baldwin, W. E. Briggs, Cartwright, Dufficy, Hanna, Hatch, Henderson, James, Krull, Look, McGavem, McKee, McLean, Nourse, Nichols, Parkinson, Poore, Ross, G. L. Simmons, S. E. Sim-

mons, Strader, Stevenson, Twitchell, G. A. White, John White, Wright, Wilder and Wheeler.

A communication was received from Dr. Moffitt of San Francisco accepting the invitation of the Sacramento society to read a paper at the annual meeting, and announcing his subject to be "Some Unusual Forms of Exophthalmic Goitre; the Recognition and Treatment."

A communication was received from Dr. Kenyon asking aid for the Board of Examiners in defense of suits. A motion was made and carried that the Sacramento society give \$50.

Dr. G. A. White reported a case of a man 82 years of age, who, seven days after an operation for incarcerated hernia, arose from his bed, without knowledge of his attendants, and took a railroad train to his home without receiving any injury or apparent harm from so doing. Dr. White called the attention of the society to this remarkable instance of vitality in a man so old.

The paper of the evening was then read by Dr. McKee on "Consultation with Other Schools of Medicine."

The discussion was opened by Drs. Wright and Hanna, and freely participated in by nearly all present.

J. W. JAMES, Secretary.

San Bernardino County.

At the regular meeting of the San Bernardino County Medical Society, held at San Bernardino, February 11th, Dr. Booth introduced the following motion, which met with the hearty approval of all present, and which was carried with enthusiasm:

"WHEREAS, In these days of progressive medicine, when the ethical, properly conducted medical journal is regarded as the prime mover, the regulator and the teacher in all things ethical, as well as the guardian, the adviser and protector of the honest practitioner of medicine and surgery; and,

"WHEREAS, The publication of advertisements of recommendation of secret remedies or medicines promotes the use of such secret remedies or medicines and is in direct violation of the Principles of Medical Ethics as adopted by the American Medical Association and the Medical Society of the State of California; therefore, be it

"Resolved, By the San Bernardino County Medical Society, in regular meeting assembled, that we heartily approve and commend the position taken by the CALIFORNIA STATE JOURNAL OF MEDICINE on the subject, and promise to Dr. Philip Mills Jones, its able and efficient editor, and to the Publication Committee, our unqualified support, morally, professionally and financially;

"Resolved, That these resolutions be spread upon the minutes of this society, and that a copy of them be forwarded to the STATE JOURNAL."

The motion was seconded by Dr. Harris and carried unanimously.

The meeting was well attended and was one of the best held by the society.

Dr. Smith of Mentone presented a paper on "The History of Bacteriology," which was of high order and was thoroughly enjoyed by all.

Dr. Talsmall of Redlands gave microscopic demonstrations along the line of Dr. Smith's paper, which impressed all with the doctor's complete familiarity with the subject.

Drs. W. H. Wilmot of Highlands and H. W. Mills of San Bernardino were elected to membership.

CHAS. S. HARRIS, Secretary.

San Francisco County.

(Special Meeting, February 2, 1904.)

Dr. Simon Barch of New York (by special invitation) read a paper, "The Role of Hydrotherapy in Infectious Fevers."

The author took for his text the Hippocratic axiom, "*Cold water warms; warm water cools.*" He called attention to the fact that many today believe the reverse to be true.

He traced the history of hydrotherapy in Russia and Germany, the popular fallacy still clinging to it, until exposed by Winternitz and Brand, who labored earnestly to instil the idea that antipyresis was not the chief aim of the cold bath. In Germany the Brand bath has fallen into unmerited neglect because the technic as laid down by its originator has not been followed; and it is due to the author's efforts that it has been rescued from a similar fate in this country. He described it as a tub bath of 70° F. with continuous friction for fifteen minutes, administered every three or four hours, when the patient is awake, and the rectal temperature reached 103°. He urged more attention to the details of technic in the administration of hydrotherapy, and thought that little progress would be made until such terms as cool water, cold water, warm water and hot water were abolished and exact temperatures stated in their stead. The chief aim in applying water below the temperature of the skin in infectious diseases was to produce a reaction which might inure to the invigorating and refreshing of the organism and thus enhance its capacity to resist the lethal toxins circulating in the blood. He dwelt upon the importance of friction, which added a mechanical to the thermic excitation, enhancing the effect of the latter and causing the arterioles contracted by the cold to dilate so that the skin was ruddy, though cold. He described his diagnostic bath as follows: When a patient manifests a temperature of 101° or over, rapid ablutions with cloths, dipped in water at 85°, are given every two hours with friction, over the trunk only. The temperature of each ablution is reduced two degrees until 60° are reached. After the patient is dried by patting with a thin linen towel, a wet compress is placed over the entire abdomen, prepared by wringing three folds of old linen out of water at 60°. This is snugly held by a flannel bandage an inch wider than the compress, around the entire body, and is secured by safety pins. If there is a persistent temperature of 103° or over, without local manifestations, it is his custom to order the friction bath of 90° F. for twelve minutes, administered in the bathroom. If the temperature rises to 103° again within four hours, the bath is repeated at 85°; four hours later at 80°, again at 75°, always insisting upon active friction. If one of these baths reduces the rectal temperature more than two degrees he pronounces the case not one of typhoid fever. Based upon the fact that cold baths are not an efficient antithermic agent in infectious fevers, this diagnostic bath has been evolved. In typhoid cases where the central nervous system was so overwhelmed that it could not respond to thermic stimuli, he advised the addition of the Nauheim Salts to the tub bath in order to arouse the cutaneous arterioles from their lethargy. In pneumonia the author does not use the friction bath because of the usual accompaniment of pleurisy, but uses instead compresses at 60° applied over the entire chest, changing them hourly as long as the rectal temperature is above 100° F.

The regular monthly meeting of the San Francisco County Medical Society was held on the evening of

February 9th, and was attended by a large majority of the members. The papers read were of unusual interest and were very carefully prepared. The discussions evidenced preparation, showing growing interest in the society.

President Rosenstirn occupied the chair, and the other officers were present.

The committee on admissions reported favorably on the following applicants for membership: Drs. Arthur Weis, Vilmas Condory, Ostroilo S. Kucich, W. F. Schaller, Thomas G. Inman, C. B. Munger, A. C. Garceau, A. B. McConnell, Lolita B. Day, W. H. Crothers, Edward Sewell, George Blumer, George D. Culver, F. M. McElroy, Emma Buckley, C. M. Armistead, W. H. Kellogg, Albert Houston, Walter Preston, Arthur L. Fisher.

Seven applications for membership were read and referred to the committee.

The librarian, Dr. Terry, reported that the library had been properly installed in the larger room recently acquired on the floor above, and that the room would be open for the use of members from 9 a. m. to 9 p. m.

On motion of Dr. Carpenter the chair was authorized to appoint a committee from the delegates which should extend, on behalf of this society, a cordial invitation to the American Medical Association to hold its meeting in this city in 1905.

Dr. Philip Mills Jones, editor of the STATE JOURNAL, announced that the publication office of the State Society was about to be changed from its present location, and suggested that an arrangement might be entered into by which the county library could have the benefit of the files of the various medical publications coming to the office, in case suitable quarters could be offered for the use of the publication office. The chair appointed Drs. Carpenter, Jones and Allen a committee to act in conjunction with the library committee, with power to conclude a satisfactory arrangement.

SCIENTIFIC PROGRAM.

Dr. A. Barkan read a paper on "Professor Killian's Radical Operation for Chronic Empyema of Both Frontal Sinuses," with presentation of a case. The subject brought out discussion participated in by Drs. Pischel, Arnold, Cohn, Nagel, Grosse and Shiels.

Dr. C. M. Cooper demonstrated two cases of hemorrhage into the spinal cord, showing X-ray photographs. Discussion by Drs. Shiels and Krotoszyner.

Dr. B. J. Lloyd, assistant surgeon, P. H. & M. H. S., read a report of a case of chronic glanders occurring in man. Discussion by Drs. Ophüls and Ryfkogel.

Dr. Charles F. Craig, assistant surgeon, U. S. A., read a paper on "The Complications of Dysentery, Amebic and Specific, as Observed at Autopsy," giving the analyses of 120 cases.

After the meeting adjourned the special committee, the librarian and the editor of the STATE JOURNAL, concluded an arrangement on the lines suggested by Dr. Jones, through which the publication office of the State Society is to occupy the room in the Y. M. C. A. building vacated by the county society library.

A fuller report of the proceedings of this meeting will be published next month.

Santa Clara County.

The Santa Clara County Medical Society held its stated meeting by special invitation at the home of Dr. J. N. Frasse, January 26th, at which a most excellent and exhaustive paper on the subject of "Cretinism" was read by the doctor. The paper treated of the manifestations of hypertrophic and atrophic diseases of the thyroid gland, and related the histories of several cases cited by modern authors.

He also dwelt especially upon the efficacy of thyroid feeding in the treatment of cretinism. Upon the conclusion of the reading, Dr. Frasse illustrated some of his remarks by introducing a patient to the society for inspection.

"This cretin is a male, now a few weeks past 21 years of age, and resides in San Jose. History is that his condition manifested itself soon after birth. There is no trace of specific disease in either parent and I am satisfied that such does not enter as a factor in this case. At the time of the subject's birth the family was living in the State of Washington, in a locality, as his grandfather states, where the water was so hard that it had to be 'cut' before it could be used for domestic purposes. Several members of the mother's maternal ancestors are said to have been born with superfluous fingers and toes, one maternal granduncle having had six fingers and six toes, but that there had never been a previous cretin nor case of goiter in the history of the family. Her maternal grandmother's father and mother were first cousins.

"The height of this patient at the beginning of treatment was 33 inches; it is now 48 $\frac{3}{4}$ inches, showing an increase of stature of 15 $\frac{1}{2}$ inches. I have had him under treatment for two and a half years, and the course pursued has been the persistent use of thyroid extract. The increase in height at his time of life is a remarkable phenomenon, as persons are supposed to have nearly reached their normal height at or soon after 18 years of age. Besides this, there is a marked intelligence which did not before exist, and he can now articulate the words 'mama' and 'papa,' with many others, though still inclined to make himself understood by signs to which he has been so long accustomed. You will observe he now understands when spoken to, following out most of your requests. When he first came under treatment he could not even walk, whereas he can now both walk and run."

DISCUSSION.

Dr. Curnow—I have had some experience in the treatment of cretinism with thyroid extract. This remedy is the only one that, so far as we now know, supplies the physical organism with those materials of which the disease itself has deprived it. Several years ago I had a patient in this city, a girl about 16 years of age; a thorough cretin, as much so as the case here presented by Dr. Frasse, and with all the physical and mental conditions attached to the disease. Like the subject we here see, she has grown at least 12 inches in height under thyroid feeding and is now quite bright and intelligent. In her case, as in this, I noticed a complete absence of the thyroid gland and cricoid cartilage. The treatment was pursued for a year before much improvement could be noted, but we were afterwards happily rewarded for our perseverance. In reference to the etiology of the disease, I think we have much yet to learn, but to my mind it seems to be a condition resulting from consanguinity.

Dr. Wright—I cannot tell you anything about cretinism, for it is a condition with which I have had no experience, but I have no doubt that such cases are often the product of intermarriage. In this connection, I want to say that it is our duty as physicians, in our public and private relations, to not only warn against the evils of intermarriage with blood relatives, but, knowing as we do that such alliances often result in mental incompetence and physical deformities, to vigorously protest against them.

Dr. Witter—Dr. Frasse's able article commands my admiration; it is so complete in all its details, and his plan of treatment so modern, that I will not strive to add anything to what he has so well said on the subject.

Dr. Jordan—My experience with cretinism is quite limited, having observed but one case of the kind, and that at a clinic at the Jefferson Medical College in Philadelphia, but from what I have here heard and seen, the treatment has been certainly adapted to the requirements, to produce such a marvelous result.

Dr. Luson—I have known the patient to whom Dr. Curnow has referred for a good many years, and am fully aware of her previous condition, it being all that Dr. Curnow has stated, together with the great improvement manifested in her case. A few weeks ago I saw her on the street. She had grown into quite an intelli-

gent looking young woman. In some cases partial extirpation of the thyroid glands are reported successful in the treatment of cretinism and idiopathic goiter. It would be an interesting subject of study to ascertain the relation of cretinism, idiopathic goiter and exophthalmic goiter to each other, if indeed any does exist. From some study and experience of these subjects I believe that the primary cause of the latter two diseases lies in some disorder of the sympathetic system of nerves. It certainly is a very deep subject for study.

Dr. Cothran thought the paper, as presented, so exhaustive that there was nothing pertinent left unsaid. The consideration of this mysterious glandular secretion, which so profoundly affects the growth and functions of both body and brain, and whose absence occasions loathsome physical deformity and hideous mental blankness, should fill us with humility and a keener realization of the limitations of our knowledge and the vast expanse of our ignorance.

Dr. Paul suggested that since a member of the mother's family had possessed extra fingers and toes, it might be well to inquire if any relationship could be traced between disease of the thyroid and hare-lip or cleft palate.

Dr. Paterson reported a case of cretinism which came under his observation two years ago. Female, 22 years of age. History of consanguinous marriages. Father was a native of the French Alps. In this instance there was a slight improvement under thyroid extract; treatment, however, was reluctantly pursued by parents and patient passed from further observation.

Dr. McNary—It is a popular belief, and also the opinion of some older authors, that coitus during intoxication is responsible for this condition. If this were really a cause I think the supply of cretins would be far greater than it now is.

Dr. Asay—In the discussion nothing has been said concerning the effects of certain waters in the production of diseases of the thyroid gland. In my former practice in the lower part of the San Joaquin valley I observed several cases of endemic goiter, in one of which the goiter entirely disappeared after removal to another locality. The water in the section to which I have referred is extremely alkaline. Does the factor exist in the water itself, or is this fluid deficient in one or more constituents? If so, what principle is toxic or what element is lacking? The fact that the family of this cretin lived where "the water was so hard that it had to be cut," as the grandfather expresses it, strengthens the opinion that to this we must look for assistance in determining the etiology of diseases of the thyroid. Cretins are found in certain districts, and in these non-cretinous cases of goiter are also found. We read in the life of Charlemagne that in the year 772, while his army was encamped on the banks of the Rhine, many of his soldiers contracted goiter. It is asserted by European writers that goiter can be and has been artificially produced by the use of certain waters, and that this expedient is often resorted to by men of their country to escape conscription. The disease appears to have been prevalent in the fifth and seventh centuries in the districts of Champagne and Liege, where, as church history informs us, the women of those cities, on account of some sacrilege, were condemned to be afflicted with goiter. In olden times the eating of the ashes of sponges was a popular habit among goitrous subjects, no doubt on account of the iodine they contained. We are not yet fully acquainted with the physiology of the thyroid gland. The removal of a portion apparently has no pernicious effect, but the extirpation of the entire gland is followed by disastrous consequences, though a certain amount of thyroid influence may be maintained by thyroid feeding or injections of thyroid extract, but sooner or later there will follow characteristic debility, arrest of growth and degeneration of cerebral functions.

Dr. Burns—This subject is so rarely met with by the ordinary practitioner that I did not expect to be so highly entertained. I congratulate the writer of the paper on the able manner in which he has presented the subject. Never having had a case of cretinism to treat, my knowledge of the subject is limited; but I believe I shall now be much better prepared to diagnose such a case should it ever fall into my hands.

Dr. Frasse—In concluding the discussion, I desire to state that this case went about fourteen years without a correct diagnosis having been made, although seen by several physicians. Great care must be exercised in thyroid feeding, or in the use of thyroid extract. If the remedy be given too frequently, or in larger quantities than necessary, it is apt to occasion alarming symptoms. The quantity to be administered should equal from four to eight grains of desiccated thyroid per diem. It seemed to me in one instance it acted better when given on alternate days for awhile. Later I was able to give a larger dose daily. The remedy must be continued throughout the life of the patient, because the system being deprived of the physiological principles of the natural gland, we must supply them by artificial means; but this supply must not be in excess of that in which the system is deficient. In using thyroid preparations

we should also carefully watch the temperature (in this case taken per rectum), keeping it at about 100°. It is usually subnormal in cretins. I do not think that there is a complete absence of the cricoid cartilage in this case. In fact I am satisfied that I can distinctly feel it. It may be that certain waters, or perhaps certain germs carried by those particular waters, may have some influence in producing the disease. People living in some districts of hard water are prone to goiter. Goitrous people are apt to produce cretins, particularly if they are blood relatives. Such cases are commonest in Switzerland or its subenvironments, but I believe consanguinity to be the chief determining factor in the etiology of the disease. Whatever may be the cause, I am convinced that we are on our way to accomplish much with this and certain forms of myxedema.

After adjournment a banquet was given the society by Dr. Frasse. The popularity of the host brought a very large attendance of members to hear his paper and partake of his hospitality.

J. LAMBERT ASAY, Secretary.

Sonoma County.

The Sonoma County Medical Society met on the evening of February 11th, at Dr. Mallory's office, with a rather slim turnout, on account of the heavy rain.

Reading of papers and discussion were postponed to next meeting.

The fee bill as reported by special committee was taken up and considered, action, however, being deferred.

G. W. MALLORY, Secretary.

WASHINGTON—Whitman County.

The Whitman County Medical Society held its first quarterly meeting of the new year at Pullman, Wash., on January 18th, Dr. W. N. Divine of Elberton, president, and Dr. R. J. Skaife of Colfax, secretary, in their respective chairs.

After the transaction of ordinary routine business, Drs. E. T. Hein of Palouse, and C. H. Russell of Pullman, were elected to membership.

Scarlet fever was the subject matter of the evening's programme, which was contributed to as follows: (1) "Etiology and Symptoms of Scarlet Fever," by Walter Farnham; (2) "Pathology and Sequelae of Scarlet Fever," by W. E. White; (3) "Treatment of Scarlet Fever," by R. J. Skaife.

In addition to the regular programme there was a paper by Dr. Armstrong of Spokane on "Treatment of Chronic Gonorrhea."

Between the reading of papers 1 and 2, Dr. Johnston of Colfax said that he wanted every member present to answer the following questions during discussions:

- (1) On what day of the disease does the eruption, in severe cases, appear?
- (2) What was the age of your patients in whom dropsy or anasarca was a symptom?
- (3) On what day of the disease did the albuminuria, if any, appear?
- (4) On what day of the disease did you first observe the "strawberry tongue"?

Dr. Ferguson of Colfax commenced the discussion of the papers by saying that scarlet fever has a greater variety of symptoms than any other disease. In his cases the eruption usually appears about the thirtieth hour from onset of the disease. He very much doubts the strawberry tongue being a pathognomonic symptom of the disease. It can not be seen until the coating comes off the tongue, which is usually on the third day. He called attention to the yellowish line that can be made on the skin by drawing the finger over it.

Dr. Johnston of Colfax said he thinks there is no pathology peculiar to scarlet fever. The pathology

is the same as that of any other exanthema. It is in the complications that there is a pathology. We can not tell whether scarlet fever or some other disease was the cause of death. In a fatal case streptococci are always found, but other cocci are also present. In scarlet fever streptococci are always found in the malpighian bodies and in the tubules, but they are also found in these situations in the other exanthemata. Dropsy is usually the first complication noticed, but it is not always due to kidney involvement. He had one patient 16 years old in whom dropsy was a prominent symptom—the only case he ever saw in which dropsy occurred at that age. He never saw albuminuria until desquamation was beginning; 12½% of all cases of otitis media are due to scarlet fever, and about the same per cent. of deaf mutism is due to the same cause. Mastoid disease has occurred as late as one year after scarlet fever, but I doubt scarlet fever as the cause. Endocarditis and pericarditis are more frequently complications than is generally supposed. Patients should always be warned of danger in this direction. Endarteritis of the left popliteal artery is not rare and is prone to result in gangreen. As to treatment of mild cases, fatality may be due to officiousness of the doctor. High enema—one pint to three gallons—gives good results when nephritis appears. Thinks acetozone ought to be good in this disease. Discharges from nose and throat are irritating—so are those from bowel. Acetozone sprayed into nose and throat, taken in water into stomach, and injected high into bowel would be good practice.

Dr. Armstrong of Spokane said he could recall one epidemic of scarlet fever in all the cases of which the rash was delayed—and all were fatal.

Dr. James of Tekoa said: "The oldest patient in whom I saw dropsy was 12 years old. I have not noticed how early albuminuria appears, I think usually on the second or third day. As to the eruption, the disease was fatal in those cases in which it was delayed."

Dr. Gaines of Oakesdale asked if desquamation occurs in every case of scarlet fever. He has had a case with all the symptoms of scarlet fever excepting the desquamation, and is not sure of his diagnosis.

Dr. Farnham of Palouse said: "I think that the strawberry tongue is pathognomonic of scarlet fever, but I do not know on what day of the disease it may first be observed, because, like all other signs and symptoms, it varies. The so-called strawberry tongue of indigestion, etc., is not a true strawberry tongue."

Dr. Ferguson spoke again, saying that he thinks there is always a strawberry tongue in scarlet fever, and that it can be identified on the third day. The eruption comes earlier than in any other disease.

Dr. Libby of Spokane said: "I do not think that the strawberry tongue can be depended on for an early diagnosis. Desquamation occurs in every case of scarlet fever excepting in those cases where death occurs before the eruption comes out. As to acetozone, I find trouble in getting the patient to take enough of it."

Dr. Maguire of Pullman said the worst cases he has had were those in which the eruption was delayed to the fourth or fifth day.

Dr. Hall of Pullman cited a case in which there was no strawberry tongue and no desquamation. The other symptoms were those of a typical case of scarlet fever, especially the bright scarlet eruption. What was it?

Dr. Smith of Latah said: "I have been astonished at the amount of desquamation in cases where the eruption was very slight."

Dr. Stuht of Colfax said: "I never make a diagnosis

on one symptom alone, but consider the history of the case and the symptoms as a whole. Amount of albumin varies very much. One reason why nephritis occurs in mild cases is because not so closely watched as the severe ones are. All cases desquamate. A mild case may desquamate more than a severe one. The later the eruption the more severe the case."

Dr. Hein of Palouse said: "I am not afraid of diphtheria, I am not afraid of smallpox, I am not afraid of typhoid fever, but I stand in the presence of scarlet fever with fear and trembling because there is no known remedy. As to diagnosis, I do not think it is very difficult. Given a sudden onset, high fever, vomiting and sore throat in a child from 2 to 10 years old, followed in a few hours by an eruption, and you are fairly sure of scarlet fever. Diagnose by exclusion. What else could it be?"

Dr. Armstrong said he does not think that strawberry tongue has any special bearing on a diagnosis of scarlet fever.

Dr. White of Colfax said: "I think the time when albuminuria appears is governed by the time of high fever."

Dr. Johnston said the point he wished to bring out is that the strawberry tongue does not appear early—not before the fourth day. "I think the diversity of opinion expressed here tonight teaches that we do not study these points as we should. I think we should keep a record of all our cases, noting in it these different questions, and in that way get at their correct answer. I believe the silver salts are of benefit in treatment of this disease, and antidiphtheritic toxin has produced good results."

The discussion of scarlet fever was followed by the reading of Dr. Armstrong's paper on "Treatment of Chronic Gonorrhea." The doctor gave the case records of nine cases showing various results under various treatments. The best results were obtained by irrigating with a mild solution of permanganate, dilating with a Kallman's dilator and injecting an oil composed of resorcin, ichthyol, balsam Peru and castor oil. Massage of seminal vesicles is absolutely necessary in those cases in which they are involved.

Dr. Wilson asked if a resisting body is necessary in order to successfully "milk" the vesicles. Dr. Armstrong answered no. A very slight stroke suffices, and besides the patient could not endure the pain if a resisting body opposed the finger. Urinary antiseptics should be administered in all cases.

Dr. Johnson's resolution amending the By-Laws so that Article I shall read: "The regular meetings of this society shall be held quarterly on the third Monday of each October, January, April and July," was passed unanimously. This change was made because of the fact that other societies meet early in the month and visiting was practically prohibited. There is now no conflict of meetings so far as this society knows.

Dr. Nelson, on behalf of the W. A. C., tendered to the society the use and benefits of the College Pathological Laboratory. Receptacles containing a preservative solution will be sent to members on application. In these specimens can be forwarded to the college, when they will be examined by the college pathologist and a report of the findings returned. The college will thus be able to secure specimens for use in teaching, and the society to enjoy the advantages of a laboratory diagnosis.

On motion of Dr. James, the tender was accepted and a vote of thanks given the college therefor.

The meeting was held in the spacious parlors of Dr. G. B. Wilson, and was followed by a banquet at the Palace Hotel.

Those present were: Drs. G. B. Wilson, Ed. Ma-

guire, H. W. Hall and Alice A. Benton, Pullman; Wilson Johnston, A. E. Stuhrt, T. D. Ferguson, W. E. White and R. J. Skaife, Colfax; Charles James, Tekoa; W. E. Gaines, Oaksdale; W. N. Divine, Elberton; Walter Farnham and E. T. Hein, Palouse; Smith, Latah; Libby and Armstrong, Spokane; Nelson, and other members of the faculty of W. A. C.

The ladies, who became excited in the game of "Pit" during the earlier hours of the evening, and who later enjoyed the pleasures of the banquet, were the wives of Drs. Wilson, Maguire, Smith, Skaife, Nelson, James and Hall, and a sister of Mrs. James.

The officers of the society for the current year are:

W. N. Divine (Elberton), president; R. J. Skaife (Colfax), secretary-treasurer; J. L. Harris (Colton), vice-president; J. D. Leuty (Farmington), J. F. Hall (Albion), and W. E. White (Colfax), board of censors; Ed. Maguire (Pullman), J. F. Hall (Albion), and G. B. Wilson (Pullman) programme committee.

R. J. SKAIFE, Secretary.

PERSONAL.

Dr. J. L. McLaren has moved from Eureka, Humboldt county, to Berkeley.

To Dr. and Mrs. Charles D. McGettigan, February 16th, a son.

Dr. Thomas Ross, Sacramento, has been appointed consulting physician of the Southern Pacific Hospital in that city.

Dr. D. D. Crowley of Oakland is now surgeon-general of California, with the rank of colonel.

Dr. J. W. Jesse, president of the Sonoma County Medical Society, has been made health officer of the county.

Dr. Charles R. Nelson has moved from Auburn to 1268 Grove street, Oakland.

Dr. A. M. Stafford has moved from Monterey to Corona, Riverside county.

Dr. A. E. Hardin has moved from Sebastopol to Pacific Grove, Monterey county.

Dr. H. B. A. Kugeler of San Francisco was married on December 26th to Miss Louise M. Coors of Golden, Colorado.

Dr. E. K. Abbott has moved from Salinas to Monterey.

Dr. J. K. McLennan has located at the Paso Robles hotel, having succeeded Dr. Glass as hotel physician. Dr. McLennan has spent much of his time during the past six or seven years at the springs, and in consequence has an extended acquaintance with the regular visitors.

Changes in San Francisco: Dr. Edwin C. Van Dyke, from 751 Sutter to Starr King building; Dr. Mary Halton, from 590 Sutter to Starr King building; Dr. F. T. Fitzgibbon, from 860 Mission to 225 Oak; Dr. Malcom Austin, from 198 Mission to 3386 Nineteenth; Dr. F. Wyld, from 1163 Van Ness to 967 Sutter; Dr. A. E. Taylor, from 1809 Broadway to 2515 Octavia; Dr. F. Delmont, from 1086 Union to 1910 Leavenworth.

Los Angeles Medical Journal.—No. 1 of Vol. I has been received. This new monthly is published by a number of physicians of the southern city, under the editorial management of Dr. E. S. Pillsbury, and is announced to be the official organ of the Los Angeles Academy of Medicine.

LAPAROTOMY. (Continued from page 91.)

contained a mixture resembling blood not coagulated; and the third contained a substance resembling a mixture of milk and pus; both were bound down by adhesions. Having passed beyond the line of adhesions, the incision was extended about two inches upward and to the left of the umbilicus; the hand was passed into the abdominal cavity and another tumor of considerable size was found just beneath the liver. There being no adhesions, it was brought down to the opening, the contents evacuated and this delivered; it contained a colorless, gelatinous substance. Another tumor, quite large and free from adhesions was found in the left iliac region; it was brought into the opening, its grumous contents evacuated, after which it was easily delivered. This was attached to the right ovary and tube by a pedicle about two inches wide, which was ligated with braided silk and cut off with scissors.

The last tumors were removed very rapidly on account of the serious condition of the patient, the parts sponged, two quarts of normal salt solution left in the abdominal cavity, and the incision closed by means of seven through and through silk-worm gut sutures. The only dressing applied was iodoform and iodoform gauze held in place by adhesive strips.

Some time before the operation was completed the ether was discontinued, two quarts of normal salt solution and strychn. sulph., grs. 1-20 were given subcutaneously to counteract shock. Reaction was well established within two hours of the time she left the operating table. During the first three days strychn. sulph., grs. 1-60 and epinephrin hydrate m. xx. were administered hypodermically every two hours, and enemas of normal salt solution per rectum every four hours. The bowels acted the third day with the aid of calomel and Rochelle salts. The dressing was changed the first time and the sutures removed the tenth day, the wound was found perfectly united. There was no pain at any time after the operation; she took nourishment regularly and slept well. The preparatory treatment extended over a period of two days, and one hour before going on the table she was given a hypodermic of morphia sulph., grs. 1-4, and atropia sulph., grs. 1-100, and at the beginning of anesthesia sulph. strychn., grs. 1-30.

The chief points of interest to be noted are the facts that she is an Albino and that the tumor lying in the left side was the only one having an ovarian tubal attachment. The largest one was connected by adhesions only, the one lying beneath the liver was connected with the tumor in the left iliac region by means of a long wide ligament.

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Next Meeting will be held at Paso Robles, April 19, 20, 21, 1904.

COMMITTEES FOR 1903-1904.

(First named being chairman.)

ADDRESS ON MEDICINE.....ROBERT F. ROONEY, Auburn.
ADDRESS ON SURGERY.....J. HENRY BARBAT, San Francisco.

ARRANGEMENTS.

JOHN MCLENNON, Paso Robles; J. J. KNOWLTON, San Luis Obispo; W. J. KERR, Los Angeles; PHILIP KING BROWN, San Francisco; WALTER LINDLEY, Los Angeles.

PUBLICATION.

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AUDITING.

E. L. WEMPLE, San Francisco; R. FELT, Eureka; GEO. A. HARE, Fresno.

MEMORIAL.

J. LAMBERT ASAY, San Jose; L. D. JOHNSON, Whittier; J. H. BARR, Marysville.

MEDICINE AND THERAPEUTICS.

H. C. MOFFITT, San Francisco; F. R. BURNHAM, San Diego; GEO. L. COLE, Los Angeles; CLARK J. BURNHAM, San Francisco; J. C. KING, Banning.

SURGERY AND ANATOMY.

EMMET RIXFORD, San Francisco; CLAIRE W. MURPHY, Los Angeles; THOS. HUNTINGTON, San Francisco; C. VAN ZWALENBERG, Riverside; H. SIDEBOTHAM, Santa Barbara.

OBSTETRICS.

HENRY GIBBONS, JR., San Francisco; J. C. FERBERT, Los Angeles; CHARLOTTE J. BAKER, San Diego; C. C. BROWNING, Highland.

GYNECOLOGY.

W. W. BECKETT, Los Angeles; L. W. ALLEN, San Francisco; C. W. NUTTING, Etha Mills; ADELAIDE BROWN, San Francisco; BEVERLY MACMONAGLE, San Francisco.

PEDIATRICS.

J. MAHER, Oakland; J. H. SEYMOUR, Los Angeles; W. B. LEWITT, San Francisco; F. R. STARR, San Francisco.

EYE.

B. F. CHURCH, Los Angeles; A. B. MCKEE, San Francisco; W. H. ROBERTS, Pasadena; A. SCHLOSS, San Francisco; W. S. FOWLER, Bakersfield.

EAR, NOSE AND THROAT.

J. A. BLACK, San Francisco; FRED BAKER, San Diego; E. W. FLEMING, Los Angeles; L. S. THORPE, Los Angeles; W. E. HIBBARD, Pasadena.

GENITO-URINARY DISEASES.

DUDLEY TAIT, San Francisco; J. C. SPENCER, San Francisco; GEORGE CHISMORE, San Francisco; PHILIP NEWMARK, Los Angeles; GRANVILLE MACGOWAN, Los Angeles.

CUTANEOUS DISEASES.

RALPH WILLIAMS, Los Angeles; A. B. GROSSE, San Francisco; D. W. MONTGOMERY, San Francisco; HOWARD MORROW, San Francisco; A. P. WOODWARD, San Francisco.

NERVOUS AND MENTAL DISEASES.

JOS. O. HIRSCHFELDER, San Francisco; LEO NEWMARK, San Francisco; J. H. MCBRIDE, Pasadena; J. W. ROBERTSON, Livermore.

HYGIENE, SANITATION AND CLIMATOLOGY.

NORMAN BRIDGE, Pasadena; P. C. REMONDINO, San Diego; W. B. CUNNANE, Santa Barbara; N. K. FOSTER, Oakland; J. CLARK, Gilroy.

PATHOLOGY AND BACTERIOLOGY.

STANLEY BLACK, Pasadena; WM. OPHÜLS, San Francisco; H. A. L. RYFKOGEL, San Francisco; ALONZO E. TAYLOR, San Francisco; E. L. LEONARD, Los Angeles.

CHEMISTRY AND PHYSIOLOGY.

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MEDICAL EDUCATION AND LEGISLATION.

H. S. ORME, Los Angeles; W. S. THORNE, San Francisco; G. W. MCKINNON, Arcata; F. B. CARPENTER, San Francisco; H. J. CRUMPTON, Sausalito.

SCIENTIFIC PROGRAM.

HARRY M. SHERMAN, San Francisco; WM. FITCH CHIENEY, San Francisco; W. S. THORNE, San Francisco.

GENERAL ARRANGEMENTS FOR THE THIRTY-FOURTH ANNUAL MEETING OF THE STATE SOCIETY.

As repeatedly announced in the JOURNAL, the Annual Meeting of the Society will be held at the Hotel el Paso de Robles, beginning Tuesday, the 19th, and continuing till the evening of Thursday, the 21st, April.

Hotel Rates. A flat rate of \$2.50 per day has been made. There are but a few rooms with bath and these will be assigned without preference. This rate includes room, board and use of hot mineral baths, and applies to all members and their families in attendance. Rooms with bath, same rate.

Railroad Rates. A rate of one and one-third ($1\frac{1}{3}$) has been fixed for the round trip. Pay the full fare going and take a **Receipt-Certificate** from the agent. This must be signed by the Secretary of the Society at Paso Robles. When you buy your return ticket, present this certificate (signed) and the return ticket will be sold to you for one-third regular rate. Tickets (and certificates) will be ready and on sale fifteen days prior to and during the meeting. **Stop-overs** not good on the **return** trip. This rate applies to the Southern Pacific lines in **Oregon**, so that members of the **Oregon and Washington State Societies** who desire to attend this meeting can avail themselves of the same rates as our own members.

Special Rates. Extra Trips. The agent at Paso Robles will sell tickets to San Francisco and return, or to Los Angeles and return, for the one and one-third rate. You may therefore extend your trip north or south at the same rate. **You cannot buy a ticket from San Francisco to Los Angeles and return (or vice versa), stop off at the meeting and go on with your trip, at this rate.** Buy your ticket **to Paso Robles only.** Return portion of these extra-trip tickets will be good for ten days.

Time Table. Trains leave San Francisco at Third and Townsend Street Station, 8 a. m., and 6 p. m., arriving Paso Robles 1:49 p. m. and 1:08 a. m. Those desiring to leave San Francisco on the 6 p. m. train, Monday, the 18th, please notify Dr. Philip King Brown, 1612 Van Ness Ave. **at once.** All cars filled with members will be side-tracked at Paso Robles and you can then sleep all night.

Trains leave Los Angeles at 8 a. m., and 1:10 p. m., reaching Paso Robles at 4:40 p. m., and 12:03 a. m. Those desiring to leave Los Angeles on the 1:10 p. m., train, Monday the 18th, communicate with Dr. Walter Lindley, Los Angeles, **at once.** Similar arrangements will be made for side-tracking cars filled with members coming up from the south.

Leaving Paso Robles; **north bound**, 12:03 a. m., and 4:40 p. m.; **south bound**, 1:49 p. m., and 4:40 p. m.

Arrangements for Meetings. A floor of the High School has been secured for the General Meetings. This room will comfortably seat 300 people. The ladies' parlor and sufficient other rooms have been secured for the meetings of the House of Delegates and Special Committees, etc.

Entertainment Features. The mud baths are about one mile away, and are at your disposal. The Paso Robles Improvement Club has arranged for a drive through some interesting country, near by, and on Wednesday noon will invite those in attendance to be their guests at a barbecue to be given at the Santa Ysobel Ranch. A special dinner will be given on Thursday evening at 8 o'clock. (**No** extra charge, except for wines.)

Important Notice to Members.

There remain but a few days in which to file with the Committee on Scientific Program titles of papers to be presented at Paso Robles. Send them in **AT ONCE.** As the forms of the JOURNAL close, titles are still coming in, so there is every prospect of a large and good program. Do not delay another day; send the title of your paper to

HARRY M. SHERMAN, Chairman,
1303 Van Ness Avenue,
San Francisco.

Important Notice to County Secretaries.

A few of the County Society Secretaries have neglected to remit the amounts due the State Society, and have failed to send in the names and addresses of delegates to the annual meeting.

The Secretary of the State Society should be in possession of these names and should receive these dues immediately, so that his report may be completed. It is therefore urged upon all county secretaries who have not already done so, to attend to these matters at once.

GEORGE H. EVANS, Secretary,
Medical Society of the State of California,
807 Sutter Street, San Francisco.

PRELIMINARY REPORT OF THE
COMMITTEE ON SCIENTIFIC PROGRAM.

The following is a list of titles of papers prepared for the Thirty-fourth Annual Meeting of the State Society, as far as the same have been submitted to the Committee at the date of this report.

The Committee has felt itself obliged to decline to receive titles by telephone, the possibility of verbal errors or of complete omission under that method being great.

The Committee must have its final meeting for the arrangement of the last details of the program on the fourth of April, in accordance with Section 8 of Article VI of the By-laws, which says:

"The papers or reports to be read, or a copy thereof, shall be placed in the hands of the Committee on Scientific Program at least fifteen days prior to date of Annual Meeting."

The Committee also asks each author to send with his paper a 100-word abstract, which will be printed in the program with the title.

HARRY M. SHERMAN,
Chairman of the Committee.

MEDICINE AND THERAPEUTICS.

ORATION	ROBT. F. ROONEY, Auburn
<i>Concretio Pericardii cum Corde (Report of a case.)</i>	Geo. L. Cole, Los Angeles
<i>The Role of the General Practitioner in the Prevention of Consumption</i>	F. M. Pottenger, Los Angeles
<i>Vaccination</i>	Edw. von Adelung, Oakland
<i>Physiological Therapeutics</i>	Lewis J. Belknap, San Jose

SURGERY AND ANATOMY.

ORATION	J. HENRY BARBAT, San Francisco
<i>The Conservative Treatment of Acute Appendicitis</i>	A. W. Morton, San Francisco
<i>Some Mechanical Aspects of Scoliosis and Demonstration of Apparatus</i>	James T. Watkins, S. F.
<i>Codes of Acute Suppurative Appendicitis Treated by the Ochsner Plan</i>	Wallace I. Terry, San Francisco

OBSTETRICS.

<i>Diagnosis and Management of Transverse Presentation in the Later Months of Pregnancy</i>	Charlotte J. Brown, San Francisco
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GYNECOLOGY.

<i>Remarks on Hysterectomy, with Appended Report of 100 Cases</i>	W. W. Beckett, Los Angeles
<i>Some Remarks on Gonorrhea in Women</i>	Beverly Mac Monagle, San Francisco
<i>Utero-sacral Ligaments and their Relation to the General Pelvic Conditions, of which Retroversion is the Chief Symptom</i>	W. Francis B. Wakefield, Oakland

PEDIATRICS.

<i>The Complications and Sequelæ of Measles</i>	J. Maher, Oakland
<i>Congenital Dislocation of the Hip</i>	P. C. H. Pahl, Los Angeles
<i>Neurasthenia in Childhood</i>	Hubert N. Rowell, Berkeley

EYE.

Symposium on Glaucoma:	
<i>Pathology</i>	W. H. Roberts, Pasadena
<i>Symptomatology</i>	A. B. Mc Kee, San Francisco
<i>General Consideration</i>	B. F. Church, Los Angeles
<i>Secondary and its Causes</i>	A. Schloss, San Francisco
<i>Treatment</i>	W. S. Fowler, Bakersfield

EAR, NOSE AND THROAT.

<i>Report of Cases Simulating Grave Mastoiditis</i>	Fred Baker, San Diego
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GENITO-URINARY.

(1) <i>Aseptic Catheterization of the Urinary Passages</i>	M. Krotoszyner,
(2) <i>Clinical Study of 15 Cases of Genito-Urinary Tuberculosis with some Remarks Concerning Treatment</i>	and S. F. W. P. Willard,
<i>Unusual Forms of Trouble of the Prostate</i>	George Goodfellow, San Francisco
<i>Fistule of the Male Urethra</i>	R. L. Rigdon, San Francisco
<i>Examination of a Subject with Gonorrhea, Macroscopic and Microscopic</i>	Geo. L. Eaton, San Francisco
<i>Contribution to the Study of Varicocele</i>	Dudley Tait, San Francisco
<i>Interesting Case of Prostatic Calculus</i>	George Chismore, San Francisco
<i>Report on some Renal Tumors</i>	Harry B. Reynolds, San Francisco

CUTANEOUS DISEASES.

<i>Syphilis from the Standpoint of the General Practitioner</i>	Geo. L. Cole, Los Angeles
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NERVOUS AND MENTAL DISEASES.

<i>The Legal Responsibility of Medical Experts</i>	J. W. Robertson, Livermore
<i>The Results of a Knock-out Blow</i>	Leo Newmark, San Francisco
<i>Locomotor Ataxia</i>	J. O. Hirschfelder, San Francisco

CHEMISTRY AND PHYSIOLOGY.

<i>Innervation of the Heart with Consideration of Cardiac Stimulants</i>	O. O. Witherbee, Los Angeles
<i>Reversible Action of Enzymes</i>	Martin Fischer, Berkeley

MEDICAL EDUCATION AND LEGISLATION.

<i>Report of Committee</i>	H. S. Orme, Los Angeles
<i>Some Reflections on State Examining Boards</i>	W. S. Thorne, San Francisco



H. BERT. ELLIS, M. D.

The President of the Medical Society of the State of California, whose picture is printed in the JOURNAL this month, is Dr. H. Bert. Ellis of Los Angeles. Dr. Ellis was born at Lincoln Center, Maine, on May 17, 1863. His primary education was obtained at the public schools of Fredericton, N. B., and his freshman year of college life was passed at the University of New Brunswick. From the Acadia University, Wolfville, N. S., he graduated in 1884. Very shortly after that he came to California, where, in 1888, he graduated from the College of Medicine of the University of Southern California. His medical school career was marked by hard and successful work, for he took the college prizes in surgery and ophthalmology and was valedictorian of his class. In May, 1888, he married a classmate, Dr. Lula Talbott, and then spent a year doing post-graduate work at the Universities of Göttingen and Wein. In 1889 he returned to Los Angeles and began practice. Since 1893 he has confined his work strictly to the eye, ear, nose and throat.

Dr. Ellis has always been prominently connected with medical societies and medical society work, both local, state and national. He has been a delegate from California to the American Medical Association for a dozen or more years, and has acted as assistant secretary of the A. M. A. For about ten years he was assistant secretary of the State Society. He has served, as secretary, the Los Angeles County Medical Association, Southern California Medical Association, and the Doctors' Social Club. For some years he was a notable figure in medical journalism, and served as secretary of the American Medical Editors' Association. He has been president of the Los Angeles County Medical Association and of the Southern California Medical Association. At present he is not only president of our State Society, but is also president of the Board of Education of Los Angeles. His activity has been as marked in medical teaching as in medical society work. From 1889 to 1895 he was professor of physiology in the College of Medicine, University of Southern California, and since 1895 he has occupied the position, in that institution, of professor of ophthalmology. He is a member of many clubs, among them being the Bohemian Club of San Francisco and the Jonathan, California, Sunset and University Clubs of Los Angeles; the last-named club can also claim him as an ex-president. Dr. Ellis has, particularly of late years, been far too busy a practitioner to be a very profuse writer, but his literary productions are always forceful and command immediate recognition. Among the more important of his papers are to be found: "Operations on the Frontal Sinus," "Operations on the Maxillary Antrum," "Mastoid Operations," "Analysis of the Retraction of Some Five Thousand Eyes," "How to Keep Politics Out of Public Schools," "Marriage, Heredity and Divorce."

California State Journal of Medicine.

Published Monthly by the
Medical Society of the State of California

PUBLICATION COMMITTEE

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GEORGE H. EVANS, M. D. G. F. REINHARDT, M. D.

C. D. McGETTIGAN, M. D. HARRY M. SHERMAN, M. D.

JOHN J. HARRISON Business Manager

Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postoffice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, Room 1, Y. M. C. A. Building, San Francisco.

APRIL, 1904.

NOTICE OF REMOVAL.

The Publication Office of the State Society is now established in Room I, Y. M. C. A. Building, corner Ellis and Mason Sts., San Francisco, where letters should be addressed and where visitors will be welcomed. Take elevator; entrance on Mason Street.

EDITORIAL NOTES.

Every member of every County Society is a member of the State Society and should attend the meeting this month at Paso Robles. While every member should attend, of course there are a good many who cannot. But there are a lot of men who can do so, though they think they cannot. To all such this word of advice is addressed. Do not harbor the idea that you cannot attend the meeting just because you are not a delegate from your society. Every member of every county society is entitled to his place at the meeting, and should be there to fill it. It will do you lots of good in more ways than one. You will hear a number of papers that will give you new ideas, and you will impart some of your own good suggestions to other physicians. You will meet a large number of your fellow-workers, become better acquainted with them, and enjoy the association and the friendship that will result. The change and rest will be just what you need after a hard winter's work, and you will return home after the meeting feeling as though you had been away for an additional summer vacation. Don't worry too much about those patients. Probably you can leave them with safety, though you

may not think so. Remember the parting advice of the professor of practice of medicine to his graduating class: "Gentlemen, when you get to fretting too much about the serious condition of some patient, remember that God is good—that 19 patients out of 20 get well, anyhow!"

State, County and Municipal health officers should not forget the meeting of the Association called at Paso Robles for the 18th of April. This is the day before the **HEALTH OFFICERS.** State Society assembles and there is no reason in the world why there should not be a large attendance of these officials and an exceedingly profitable meeting. A number of excellent papers and talks have been arranged and it is believed that the meeting will be very well worth attending. And, further, it is really the duty of these officers to get together and come to a good understanding of the many topics which they have to discuss. Their labors are of vital interest to the health of the community and they should agree upon a common basis for many lines of work. It is earnestly hoped that there will be a large attendance at this meeting.

Your careful attention is called to the statement from the Board of Examiners printed on page 132. It may be said at once that practically all of these **ILLEGAL PRACTITIONERS.** arrests and prosecutions are directly due to the energy and the perseverance of the President of the Board. Great credit is also due the District Attorney's office, and Mr. McGuire, attorney for the Board of Examiners. One of the weak points in the medical practice law has been corrected through the initiative of the President of the Board, who swears to all complaints and warrants. This is by no means obligatory under the law. Nor is it required under the law that the Board shall take these actions, or that members of the Board shall aid in getting evidence on which to base arrests and prosecutions. It is, however, necessary that someone shall do this work, if it is to be done, and the profession seems to clearly recognize the fact that it must look to the Board of Examiners for such service. The JOURNAL, for one, does not hesitate to proffer its sincere thanks. The work has not been easy, for opposition has often been encountered where aid should have been extended. A man's friends or relatives, or his otherwise spotless reputation, have no bearing upon the question as to whether or not he is an illegal practitioner. The fact may be clearly and unmistakably determined by the answer to a single question: Has this practitioner a license or certificate from the Board of Examiners? If not, he is an illegal practitioner, and if he is practicing

medicine he is doing so in open violation of the law, and should be arrested. There can be no argument or discussion; it is not a matter of opinion, but a matter of fact. Sympathy does not enter into the question, nor should friendship; nor does personal animus. The public, whose servants we are, should be protected; every man who is violating laws intended for the public protection, should be arrested, and that promptly.

For many reasons the work of the Board in prosecuting illegal practitioners has been slow.

ENFORCE THE LAW. Every trick of the law has been used to interfere with the work; and this by those who should be with us and not against us, as well as by the recognized quack. But on the whole, good progress has been made and the law is by no means a dead letter. The contention that the law should not be enforced simply because its constitutionality has been questioned, is absolutely absurd. The law remains until it is wiped out, and the mere fact that the Supreme Court is considering its constitutionality does not legalize the status of the illegal practitioner. Practically all of the corporations, railroads, steamship companies and health boards have recognized the value of enforcing the law, and have, at the request of the Board, dismissed illegal practitioners. Two exceptions may be noted. One is the Equitable Life Assurance Co., whose medical referee in this locality is an unlicensed physician. The matter was called to the attention of the company, but it is reported that they have decided to do nothing in the matter, taking the ground that this physician does not practice medicine and so does not come within the provisions of the law. This may be technically correct, but is it professionally and ethically right? Does it gratify your sense of right dealing to contemplate this lack of respect toward the standards which you have said shall apply to medical men in your state? Is this corporation so big, so powerful, so rich, so influential in this state that it can with safety and immunity disregard the respectful behest of your representatives—the men you have chosen to stand for you in the protection of the public and the enforcement of the law? Think about it. It is the principle involved, the support given to other persons who are not licensed, and who do practice medicine—illegally.

In a state institution presided over by the president of one of our county medical societies, is a physician who has no license to practice. Here is a man who is employed by the state and is caused, by virtue of such employment, to violate a state law! The state aiding and abetting in the open and continuous violation of its own

law! That is certainly a good (?) example to set. The Board of Examiners notified the proper state officials, but the request that the law be enforced was ignored. In some correspondence relating to the prosecution of another illegal practitioner, occurs the following quotation from a letter written by the superintendent of the institution above referred to, to the district attorney of another county:

"Further, one of the graduates of the P. & S. is one of my assistant physicians in the _____. A complaint was made to the Governor and to the State Lunacy Commissioner against him. This man wrote to the President of the Board of Medical Examiners a letter of inquiry simply asking when the next meeting of their Board would take place. * * * He went before the Board, took the examination and was turned down. The matter was referred to the Lunacy Commission at which session there was present Dr. F. W. Hatch, Superintendent of State Hospitals; W. S. Melick, Secretary of State Board of Examiners representing the Governor; U. S. Webb, Attorney General, and C. F. Curry, Secretary of State; also Dr. N. K. Foster, Secretary of State Board of Health. Their decision was that inasmuch as the constitutionality of the law had been called in question and the matter was before the Supreme Court for adjudication that the matter be left 'statu quo' until that decision was rendered."

That seems to be truly a Solonic decision! On the same line of reasoning it would seem possible to commit all the murders you cared to, should some one only question the constitutionality of the criminal law. There's aid and encouragement, with a vengeance!

Either the law should be upheld or it should be done away with. If it is good, then you should aid in carrying it out and enforcing

HELP OR HINDRANCE. it, and not allow obstacles to be placed in the way of those who endeavor to do their duty. The fact that a conviction has been secured in every case prosecuted before a jury by the Board, is evidence that its method of procedure is both good sense and good law. It seems almost unbelievable, but the Board reports that its work has been hindered very greatly by licensed members of the profession. Some of these, by letters and verbal requests, and through professional and political influence, have endeavored to upset the work of the Board and prevent certain arrests and prosecutions. Is this sort of thing fair or right? Are you going to tolerate it? If you are—if you are going to permit of "exceptions"—then let us try to do away with the law altogether. In at least one instance several men of prominence in the community, professors in medical colleges, a State

official and even a *member of the Board itself*, went so far as to suggest measures by which the ends of the law could be defeated; and this in spite of the overwhelming evidence in the hands of the Board, and the confession of the defendant! Does that meet with your approval? A member of the Board—a man appointed to carry out the law—one sworn to obey the law and safeguard the interests of the people of California, actually suggesting how the law might be infringed! Would it not be a nice state of affairs if all the members were of the same stripe? There is another thing. Some doctors are aiding illegal practitioners to evade the law by harboring them in their offices, or using them as cappers, and in case of arrest go into court and swear that the defendant is merely a student or office assistant. The courts of many states have decided that the only professional position open to an illegal practitioner is that of hospital interne. Does this sort of thing meet with your approval? It certainly has not found favor with juries in San Francisco.

Elsewhere in this issue the subject of State Society Journals is discussed at some length. If one may judge of the general feeling throughout the state by the expressions that various members of some fifteen county societies have made to the editor, California physicians decidedly approve of the journal plan. The question will soon confront the newly amalgamated New York Society. At last the obstructionists in that State, in both the Society and the Association, have given way, and union will be an accomplished fact very soon—as soon as the county organizations can act, and many of them have already ratified the agreement. Shall the Society then carry on the Association's journal? The *Buffalo Medical Journal* discusses the question, in a recent issue, and urges that the journal (of the Association) be discontinued and the old series of annual transactions (of the Society) kept up. The Society has published its Transactions for nearly a hundred years and this seems to be the principal argument for continuing to do so, and ceasing to publish the journal. It is also claimed that copies of a journal become lost or destroyed and then members have not a complete record. The further question of greater expense is about the only other argument adduced to support the plea for discontinuing the journal, when the Society shall have absorbed the Association. How puerile these arguments seem, when compared with the reasons for a State Society publishing a journal! It is reasonably safe to say that the New York Association could not have attained nearly the size, and the influence which it has secured, without its journal. It is also safe and conservative to prophesy that the profession in that State will

not be well or fully organized if the journal is discontinued. Twelve messages a year to each member are worth a whole lot more than one; more than twelve times as much as one delayed volume of "Transactions" which nobody thinks of reading. They may look well on the library shelves—but so does a file of bound journals. There does not seem to be any good reason why the volumes of journals cannot be bound and added to the "nearly one hundred volumes of Transactions." Certainly, in the State Society journal one does not find a *paid reading* notice following a grave editorial in the editorial pages, as is the case in the very journal making the argument against State Journals, the *Buffalo Medical Journal*.

One of the important matters to come before the State Society at the Paso Robles meeting will be an invitation to the American Medical Association to hold its sessions in California next year. Oregon and Washington are also making overtures in the same direction, and the *Journal of the A. M. A.* has editorially referred to Oregon's proposed invitation, stating but little probability exists that the meeting will be held on the Coast for some years to come. The objections given do not appeal to the JOURNAL as reasonable. One is that the distance is too great and the time necessary to make the trip cannot be spared by the busy Eastern doctors. By careful computation it may be demonstrated that the distance from the Missouri to the Pacific Coast is practically the same as from the Pacific Coast to the Missouri; and while it is true that more members of the Association live to the eastward than out this way, it cannot be proved that their time is of greater value than is that of the Westerners. If a Chicago man, for instance, cannot spare the time to attend the meetings of the A. M. A., he would be as unlikely to visit the Atlantic Coast as the Pacific. A cordial and hearty invitation to the Association to come out to the land of sunshine and flowers would be accepted by hundreds who know the delights of a sojourn here through experience, and by other hundreds who would be glad of an opportunity to come.

A most aggravating case of malpractice suit without reasonable foundation in fact, based upon ridiculous claims and supported by **LEGALIZED** testimony and "expert evidence" of **BLACKMAIL.** all sorts—though mostly bad—has pestered a member of the Society for more than five years. At the first trial, the jury stood eight for defendant and four for plaintiff. At the second trial the defendant won. But appeal was taken and the Supreme Court has

very recently, though after two years consideration, reversed the verdict and ordered a new trial, all because text-books etc., were introduced in the trial, and these, the court holds, are hearsay evidence and should not be admitted. So the weary work is to be gone over again. The trouble and anxiety, to say nothing of the thousands of dollars already spent, count for nothing; the courts will allow the imposition to continue and require the spending of more thousands of dollars. Here is food for thought. We are becoming a strong organization and certainly possess a large potential strength. Can it not be exerted? Should there not be some much-needed legislation, when conditions are such as to permit this sort of thing to continue? The medical profession is regarded as legitimate prey by certain elements in the community, and if the doctor has any property, if he is worth suing, the slightest imaginary pretext—or no pretext at all—is taken on which to base what is called a “mal-practice suit,” but what is really a hold-up. The vast majority of such suits are filed with the idea that the victim will compromise; often he does. But Dr. Kreutzmann is not of that stuff; he has fought the suit, and will fight it to a finish. The JOURNAL would suggest to the Committee on Legislation that here is material ready to its hand.

Careful examination of the suit against Dr. Kreutzmann and the facts recorded in its connection, fails to reveal the slightest ground for the plaintiff's contention. **UNJUST ATTACK.** The patient was examined and diagnosis of ovarian cyst made. Six months later she was again examined, the tumor existed, and operation was decided upon. The abdomen open, it was found that the uterus was enlarged and presented a fecund appearance. Pregnancy could not be positively excluded, so the abdomen was closed and nothing further was done. Six months later, one of the witnesses testified, the tumor was reduced in size and the patient very much improved. At the trial she was the picture of health and had recovered from that for which she sought relief in the first instance. Yet in spite of these facts, the suit went forward and reputable physicians permitted themselves to appear and testify against the defendant. It is alleged that personal feeling, or, rather, ill-feeling actuated some of the witnesses for the plaintiff. Of this we have no knowledge, but if it is the case, it seems to the JOURNAL that the Society should step in and protect its members from such unjust attacks. The final consideration always should be the net result to the patient; if the patient is improved by what the physician has done or has not done, he is certainly justified in his judgment. The whole life experience of the doctor is made up of exercise of judgment, and if

his acts are in the main right, or if the results of his acts are to the benefit of the patient, he should be protected by his fellow-practitioners. He who attempts to injure a brother practitioner, unjustly attacked, often injures himself more than the defendant. We, as a Society, certainly should stand for harmony, coöperation and protection of ourselves and of each other.

“The registration of all dairies” is the first in the list of desiderata suggested by the Department of Agriculture in its pamphlet on the **PURE MILK.** “Milk Supply of 200 Cities.” The second suggestion is that there should be “Official indorsement of properly conducted dairies.” It is to be noted that there is no suggestion of attacking the bad dairies; the fact seems to be recognized that better results may be brought about by commending the good thing than by striking at the bad thing. All the suggestions are most excellent, as applied to milk; they are equally excellent as applied to drugs and medicines, which are notoriously in a demoralized condition. As things stand now, anyone except a doctor and a druggist may on the one hand prescribe, and on the other sell and prescribe, drugs and medicines, with safety from legal interference. Any old rascal, charlatan or ignoramus may make up what he pleases, call it what he will, and delude whom he may into thinking it what it probably is not—something good, useful or to be prescribed. He may (and does) make “official” preparations from worthless material, as the reports of state and national committees on adulteration have been showing for years. He may do this with perfect safety, for he is under no legal restraint nor control, nor is he responsible to anyone for those he kills or allows to die under the administration of his worthless stuff. Why not go beyond the milk stage and apply a little of the principle of “registration” and “official indorsement” to those things that are at least as important in the conservation of human life as is milk? Why not say that the worthless 90 per cent of crude drugs imported into this country to be made up into medicines for “home consumption” shall find some other consumers? Some day we shall wake up.

ANOTHER OPINION ON ADVERTISING.

This JOURNAL, in its February number, quoted the editor of the *St. Louis Medical and Surgical Journal* as saying, anent the advertisements of “proprietary medicines”: “We have many, and hope to get more.”

There must be some definite relation which an editor bears to his subscribers, and a definite way in which he thinks of them. This is necessary, for he has, in some way, to please them to keep their

patronage. How does this editor of the *St. Louis Medical and Surgical Journal* think of his subscribers and what sort of subscribers has he? If we look over the advertisements in any of the ordinary medical journals that are given us, and in not a few of those that we pay for, we are struck, primarily, by the happy optimism of them all. This optimism goes beyond the limits of reason in most of the items and well beyond the truth in many. In some instances a downright lie is plainly printed. Now these advertisements form part of the journal for which the subscriber pays; they are sold to him with the rest of the printed matter with which they are bound. It is the hope of the advertiser, in which the editor must share—for their interests are identical in having the advertisements profitable—that subscribers will read the advertisements, will believe the statements made in them, and buy the goods exploited.

The medical profession as a whole is a fairly well educated body of men with a good knowledge of the sciences collateral to medicine. They are able to discriminate between what is true, what is plainly absurd and what is obviously fraudulent. If the subscribers of a medical journal are *not* able to so discriminate, still no editor would dare to tell them so on his editorial pages. But when he sells them statements about proprietary medicines which cannot stand intelligent scrutiny, he is practically saying to them: "You are a set of ignorant, gullible men; believe what my advertisers say, buy their wares and pass the fraud along." If the editor printed this on one page, he would insult every subscriber. He equally insults him if he prints what is tantamount to this on other pages. For it is an insult to any physician's intelligence to have put into his hands, and be made to hold there if he holds the medical journal, statements about drugs and combinations of drugs that are manifestly absurd or fraudulent.

There is another thing to be noticed about advertisements; many are illustrated, the illustrations being intended to attract attention by being bizarre or grotesque. This is following the custom of the army of advertisers who endeavor to secure attention to soap, whiskey, automobiles, cigarettes, etc., etc., by supposedly apt or attractive illustrations. Now, usually, the thing that requires extensive advertising of this character is pretty poor stuff. The illustrations of this sort that are made part of many medical advertisements to a certain extent stamp the articles as unable to stand on their own merits and as needing extraneous bolstering and support. Moreover, they can only reach the unthinking man, who would be guided by what struck his fancy rather than by what appealed to his judgment. Why should an editor, who would not dare to say on his editorial page: "My subscribers are a pitiful lot, whose actions

can be swayed by the influence of contemptible and silly pictures," say just the same thing on his advertising pages, by allowing such pictures there? Such an editor, very possibly, belongs to the class that accepts the celluloid desk ornaments and writes, in his patients' houses, prescriptions for proprietary mixtures, using a pencil presented by the manufacturer of the mixture.

The JOURNAL has been not a little shocked by the frankness of the editor of the *St. Louis Medical and Surgical Journal*. It has to acknowledge the financial assistance that comes from advertising pages well filled, but it is facing a deficit in its accounts because it has flatly declined certain lines of advertisements that are financially profitable; it considered them to be unfit to offer to intelligent and reputable subscribers, and to the members of the Medical Society of the State of California, who are its owners. This JOURNAL looks with surprise at the advertising pages of many journals, the editors of which would repudiate the insinuation that they could ever prescribe for their own patients the concoctions which are boastfully advocated in their advertising pages.

The JOURNAL does not know the editor, nor has any attention been given the advertising pages of the *St. Louis Medical and Surgical Journal*; but if that journal has printed any of the advertisements that this JOURNAL has refused, it believes that its editor must consider that he can serve up any sort of material he chooses to his subscribers, confident that they are too ignorant to understand that a definite effort is being made to impose on them, and that he can attempt to draw attention to what *should* be a statement founded on scientific fact by some idiotic picture which he thinks will please their feeble minds.

In brief, a medical journal should edit its advertising pages with the same care that is given to the editorial pages themselves. If it does not do this, it is aiding the debauching of the simpler members of the medical profession who believe all the statements of all the advertisers. If it does not do this it is insulting the intelligent, by offering them for perusal, together with the reasonable announcements of responsible commercial houses, a collection of inconsistent, unbelievable and often fraudulent statements. *Furthermore, it is stultifying the advertisements of good things by putting them in the same journal with the advertisements of the bad things.*

Plague Case No. 118, occurring in an Italian housewife, has been bacteriologically confirmed, according to the report to the P. H. & M. H. Service, by Dr. Rupert Blue. The report for the previous week confirms the diagnosis in cases 115, 116, and 117; respectively the daughter, father and mother of an Italian family. In the case of the father, the disease was of the pneumonic form. Up to the time of going to press, case 118 is the last recorded.

ORGANIZATION AND THE ASSOCIATION JOURNAL.*

By PHILIP MILLS JONES, M. D., San Francisco, Cal.

"How long will it last? What is going to keep the men together when they are organized?" These questions have been repeatedly asked of the writer, in the course of his organization work amongst California physicians, and he has necessarily given the matter much careful thought. The answer is not so difficult to find, if we stop and think why organization is progressing so rapidly. It is, obviously, because a lot of energy is being put into the work by a comparatively small number of men, scattered throughout the country. If an equal amount of energy is continuously put into the work, after organization is well accomplished, it will be maintained. In this world you get just about as much out of a thing as you put into it. You get mighty little for nothing. Granted a fully organized state medical society that sits calmly down and does nothing for its members, and in about two years it will have woefully shrunk. Given the same society constantly at work for its members, producing what they want and protecting them in every way that it can, the society feeling will remain strong and the organization will not lessen in numbers. An object lesson may perhaps be permitted. In California we give our members, annually, a Register and Directory of all physicians within the state; to non-members this book is sold for \$2.50; we give them a monthly JOURNAL; to non-members the subscription price is \$3.00. Thus a member receives that which has a face value of \$5.50 in return for his dues to the county society; in all but three or four cases these dues are but \$2.00 a year. The next problem is to make these publications actually worth their face value. The Register may be conceded; it is certainly worth \$2.50. There remains the JOURNAL, and this must be made so valuable to the physicians of the state that they would find it difficult to get along without it. It must be, first of all, *the* news-distributer of the state and must devote its first effort to getting news of county societies and their official transactions. It should be ever watchful of the whole state and country for those items which will be of greatest interest and benefit to the members outside of the larger cities. It should look steadily at the man who does *not* take half a dozen journals, but who is nonetheless a most important member—if not *the* most important member—of the society. That is the policy outlined by your editor and the policy which has been accepted by the journal of our far Western state.

But why cannot a private journal, publishing the State Association matters officially, do just as well? For a number of reasons. In the first

place, such a journal, the official organ of the organized members of the greatest of the learned professions within a given territory, should be absolutely and exclusively under the control of the professional organization itself. It must be absolutely free and independent, and this can never be if it is the property of some individual or company and not the property of the State Association. Any individual or company publishing a medical journal does so for but one thing—profit. Such being the case, and I think it may stand without discussion, dollars will ever be the first, rather than the last consideration. Right, too much under the influence of dollars, is very liable to take on a somewhat peculiar and mottled appearance, and the elasticity of rules or ethical provisions is apt to be somewhat stretched. Now while dollars should by no means be ignored in conducting a State Association journal, they should be the last and not the first consideration when any question of policy, of ethics or of professional conduct is to be considered. The State Association should have a mouth-piece (its journal) and through it should speak at all times to its members. It should speak with profound courage and utter straightout truths for the help and the guidance of its members, and for their protection. That a State journal may do these things and may adhere strictly to the right path in the matter of its advertising, and still build up enough productive pages to pay, has been demonstrated.

"It is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies." That ethical principle is embodied in the document which was unanimously adopted, amidst great applause, at New Orleans last year. It is still in effect, I believe, yet it is weekly violated by almost every medical journal published in this country. There are some half-dozen exceptions. That medical journals "promote the use of secret remedies" when they advertise them to their readers, is incontrovertible; that they violate this principle of ethics in doing so, is equally beyond contention.

See where the influence of the State journal comes in. I am fully conversant with the facts in California, so will cite that territory as an example. The biggest medical weekly in the world, and the "greatest advertising medium for proprietary medicines in this country", reaches something under 500 doctors in California. The STATE JOURNAL, on the other hand, reaches over 1,500 doctors, and what is more, the STATE JOURNAL is *their* journal and they take an active interest in its every page and utterance. Doubtless conditions in Kentucky are about the same, and the *Association Bulletin* reaches several times as many doctors as does the *Journal of the A. M. A.* Its influence will therefore be several

(* Written for the *Bulletin of the Kentucky State Medical Association.*)

times as great as is that of the larger journal, and it should be always, as it is now, for the best and for what is right, irrespective of any commercial influence. The State Association journal is more than a medical journal; it is the means of communication among the members of a large family. It is the organ of the county society as well as of the State Association, and as such comes so intimately into relations with every member that its influence cannot but be great.

It has been said that to speak the fearless truth is a luxury that few can afford. This may be true. Certainly it entails trouble to the speaker. But ought not a great and powerful organization of medical men such as is represented by your State Association—ought not such an organization to have some absolutely untrammelled and unbiased means of speaking much needed truths? Can you not afford the luxury of continuing the good work you have undertaken? All people, no matter what their walk in life or their life's work, need constant instruction in their duty and in those things which pertain to the best and the right work. Therefore we have trade journals of all kinds; therefore we should have a medical journal, owned and controlled by the State Association, in every state in the Union.

But many large advertisers do not like a medical journal that tells the truth. True; and we have incurred the enmity of some such. But we have also gained the friendship of many others, and we have gained the approval of our members. The component societies which go to make up our State Society, way out here on the shores of the broad Pacific, have begun to officially adopt resolutions pledging themselves to the right policy, and in due course all of them will probably act.

Not only should it be the duty of every State Association to publish its own journal, but to my mind it is the only way in which full and complete organization can be secured, and when secured, maintained. The problem of keeping up interest and maintaining the medical organization is a large one. Your editor has the major portion of the work on his shoulders, for your journal must accomplish the task. He will have much work and plenty of criticism; but he is well endowed with those qualities which go to make for success, and he can handle the situation. He has given you a good journal to start with; help him to give you a good journal for many years to come, and so help yourselves.

CORRECTION IN PRELIMINARY PROGRAM.

On page 101, in the Scientific Program, under "Surgery and Anatomy," the title of Dr. Terry's paper should read "Cases of" instead of "Codes of."

Under "Obstetrics" the author's name should be Charlotte J. Baker, San Diego.

MEDICAL LEGISLATION COMMITTEE.

In response to the request of the Chairman of the National Committee, the representative of the auxiliary Committee for California, Dr. Philip Mills Jones, telegraphed to the President and wrote to the senators and representatives of California in Washington, urging the appointment of Col. Gorgas upon the Panama Canal Commission. The County representatives were also requested to take similar action, and it is hoped that they did so promptly. While the request came too late to do any good, at present, it may have some effect eventually. At any rate, it is just as well to get the newly installed machinery of organization oiled up and try the wheels before the great occasion arises.

ALAMEDA COUNTY ANNUAL DINNER.

On the evening of March 8th, the Alameda County Medical Association gave its annual dinner, which was, as usual, a great success. The dinner was given at the Athenian Club, in Oakland, and the large table was well filled. Dr. Maher presided and was a most felicitous toast-master. Several guests from San Francisco were present and it was noted that most of them did not try to escape until barely time for the last boat. The annual dinner is an excellent institution and should be encouraged; it does vastly more to promote harmony and good feeling than the casual observer would suppose. It is also an excellent idea to invite the editor of the JOURNAL; that also promotes harmony.

MEETING OF HEALTH OFFICIALS.

On Saturday, March 12, there was a joint meeting of representatives of the Federal, State and San Francisco health authorities held at the office of the Marine Hospital Laboratory. The Marine Hospital Service was represented by Past Assistant Surgeon Dr. Rupert Blue, Dr. O'Neil and Dr. Matheson; the State Board of Health by Dr. M. Regensburger and Dr. N. K. Foster; the local Board by Dr. J. W. Ward, Dr. D. F. Ragan and Dr. W. C. Hassler. The condition of Chinatown, in San Francisco, was the chief subject under discussion, and the reports of inspecting officers went to show that the district is in a very much more sanitary condition than it was some months ago, the improvement having been accomplished since the various health departments have been working harmoniously together.

SPITTING ON TRANSFERS.

Just after the last number of the JOURNAL was closed and ready for the press, a member of the Publication Committee noticed the following telegraphic note, which is so directly in line with one of our editorials of last month that it is here reprinted:

LOCKJAW CAUSED BY CUT FROM TRANSFER.

New York, Feb. 18.—Lockjaw caused by a cut on the hand from a transfer slip has caused the death of George Powers, a street-car conductor here. The cut was sustained two weeks ago while Powers was tearing the slip from his book for a passenger.

In this connection the Board of Health has issued a mandate forbidding conductors to moisten their fingers with saliva in order to separate the transfers before delivering them to passengers. Fears of disseminating disease germs caused the board's action.

The University of Munich is reported to have been opened to women students on the same basis as men. The gymnasium course and certificate are required of those who are recognized as regular students; those not having these requirements are admitted merely as "hearers."

THE RECENT EPIDEMIC OF SMALLPOX
IN CALIFORNIA.*

By DANIEL CROSBY, M. D., Alameda.

THE recent epidemic, which is still active here and there in the Western States, and which has been very active in the East, has been so unusual in the mildness of its attacks upon those usually considered most susceptible to it, has so seldom killed or even deeply marked those of its victims who have been unprotected by vaccination, that grave doubts have arisen in the minds of medical men as to its identity.

A brief description of the disease: It begins suddenly with a rigor, or at least with chilliness, primary fever ranging from 101 to 105, headache, dizziness, anorexia, nausea, vomiting, and the general symptoms of gripe, and, during the first days, this is the diagnosis usually made. In from 48 to 72 to 96 hours macules make their appearance, usually about the roots of the hair, on the forehead, on the cheeks, at the corners of the mouth, in front of the ears, on the backs of the wrists or backs of the hands. In from 24 to 36 hours the eruption has extended to the remainder of the body. These macules very rapidly change to the typical papule, so rapidly, indeed, that they are usually not seen except in the papular stage. With the appearance of the papule there is some relief from the general constitutional symptoms. The papules change into vesicles somewhat earlier than usual; frequently on the second or third day distinct vesicles are seen. These vesicles are of a dull pearly color, their covering being thick and resistant, giving them a translucent but not a transparent appearance. Umbilication is seen in some of the lesions, but not in all. With the appearance of the vesicles complete relief from all the constitutional symptoms is experienced, and the patient feels well enough to be about.

All papules do not go on to the formation of vesicles, but some undergo resolution as it were, and many of the vesicles instead of going on to completion become stationary and undergo desiccation while no larger than pin-heads. Thus we have papules originally with the typical shotty feel and beginning vesicles, remaining stationary, giving the casual observer the impression that the eruption is developing in distinct crops, whereas in reality the crop is all one, but part of it is undergoing retrograde change. This condition is seen in a large number of cases and is commented upon by Fox of New York as being typical of modified smallpox. Frequently as early as the fourth or fifth day the vesicles change into papules. During the period of pustulation it is not uncommon to find the mucous membranes more or less generally involved, occasionally the eyelids, lips, nose and tongue swelling to a considerable degree. In severe cases the voice is husky, the breathing somewhat difficult and deglutition

almost impossible. Just as the primary eruption comes earlier upon the face than upon the trunk and extremities, so that part of the eruption which goes on to vesiculation and pustulation also appears a day or two later, so that while pustules may be seen upon the face, vesicles are still to be seen upon the body.

In a small percentage of cases the appearance of pustules is accompanied by a secondary rise of temperature, in some cases so slight that unless a morning and evening thermometric record is made the change will not be noticed; but in a few cases it is markedly severe, reaching even to 105. The pustules are also accompanied in a large number of cases by very severe itching. The pustules rapidly go on to desiccation, but in those cases not accompanied by a secondary fever the patients resist any attempt to keep them in quarantine or control. The period of desiccation varies from 5 to 20 days, upon the palms and soles taking longer.

When desiccation occurs, and the thin crusts have fallen off, the solid part of the pock remains for a long time, giving the appearance of warty excrescences on the skin, and this is one of the points adverted to by those who consider the disease not possibly small-pox; although William Welch of Philadelphia comments on it as one of the points noted in the large number of cases seen by him in the municipal smallpox hospital of Philadelphia. Many purple spots are left also by crusts in falling off, and these give the patient a peculiar spotted appearance, which, however, wears away in a few months, leaving the dead white of the pit prominently noticeable. In a few cases the pitting is very marked.

Differential Diagnosis from Varicella—1. Prodromal symptoms occur two or three days before the outbreak of the variolous eruption. In the very mild cases, however, these are very slight and occasionally absent. In varicella the symptoms and eruptions are practically synchronous.

2. Constitutional symptoms usually more severe in smallpox, but in the extremely mild cases these offer no guide.

3. Distribution of Eruption—Smallpox as a rule most profuse upon the face, arms, hands and legs. Chicken-pox, greater part of eruption on trunk and covered areas.

4. Character of Lesions—Smallpox: Macules shotty papules, vesicles, pustules. Vesicles often show umbilication and, as a rule, are uniform in size, except those before mentioned which abort before perfect evolution. Many, but by no means all, are multilocular, and all are resistant and not easily ruptured with the finger nail. They do not appear in crops, but pursue a steady course, the eruption upon the body being later than upon the face and hands. Chicken-pox: Velvety dew-drop vesicles, always unilocular, thin-walled,

*Read at the Thirty-third Annual Meeting of the State Society, Santa Barbara, April 21-23, 1903.

easily ruptured, varying in size and appearing in rapidly successive crops. Duration of eruption much shorter than in smallpox.

Having seen some of these cases in my private work and in company with my colleague, Dr. Clark of the Alameda County Hospital, it occurred to me to investigate the characteristics of this disease as it appears in this State and elsewhere. Accordingly, nearly two hundred letters were sent out to various points where the disease was or had been prevalent, asking for data and for descriptions of the disease from incipency to complete convalescence. A very general response was elicited, and I am under considerable obligation to the medical men throughout the country for their care in reporting progress of epidemics and in giving clinical evidence in support of the conclusions which their experience forces them to form. The number of cases reported is something over eight thousand. Records sufficient for giving accurate data were in a number of cases not kept; but in probably one-half of the number approximately correct reports are had. These reports give initial rigors or marked chilliness in 78 per cent., lumbar pain in 79 per cent., pustulation 94 per cent., involvement of mucous membrane, 78 per cent., palms and soles, 88 per cent., severe pitting 9 per cent., death-rate less than one-half per cent.; second attacks reported in 14 cases. The disease as described everywhere tallies with that with which we have been brought in contact in Alameda county, with the exception of Woonsocket, R. I., where the disease presented characteristics more nearly approaching a severer type of variola, as evidenced by their death-rate of 12½ per cent.

That the appearance of the disease in the United States in its present form dates from the return of our soldiers from our new island possessions, there seems to be small doubt; equally doubtless is the fact that its extreme prevalence is due to its having been regarded as a mild disease, somewhat annoying to be sure, but devoid of danger, and hence not demanding quarantine. In the discussion as to the identity of the disease, the basis for refusing to accept a diagnosis of smallpox seems to rest upon the following grounds:

1. Mildness of attacks among those unvaccinated, and especially among those recognized as being markedly susceptible to the disease, coupled with severe attacks in those recently apparently successfully vaccinated. (Happel, Tenn.)

2. The fact that in a series of 500 cases, four out of six responded to successful vaccination after convalescence from the disease. (Thompson, San Bernardino.)

3. Rapidity of evolution of the disease.

4. Absence of typical pustule.

5. Absence of secondary fever.

6. Absence of pitting and absence of history of

the usual sequelae of smallpox. (Porter, Simon-ton, Sloan.)

7. Absence of appreciable death-rate.

The basis for claims as to the propriety of calling this disease smallpox rests, in the records which I have been able to accumulate, upon the following facts: From the various parts of the country reports have come in giving details of extensive mild attacks characterized by none of the manifestations of severe smallpox, with but few exceptions. In nearly every community in which the disease has made itself felt we have records of the occurrence of some severe cases, and even of death from the disease. The following letter was received by me from William Osler of Johns Hopkins with reference to the disease there:

We have had very little smallpox here owing to the vigorous action of our State Board of Health, but the epidemic throughout the country has been characterized by singular mildness; in many cases it has not differed specially from chicken-pox. We had an interesting local epidemic in the hospital among the colored patients in which the first case was mistaken for chicken-pox, and it was not until two or three more severe cases occurred that the nature of the disease was manifest. There is no question, however, that this is true smallpox, and oddly enough these very mild epidemics have been described at intervals since the time of Sydenham, and even in the pre-Jennerian days there were outbreaks in which the mortality was almost nil.

Cody, the Health Officer of New Bedford, Mass., gives an account of some 250 cases in which the attacks, while generally mild and of the same type as that which has been met with in the West, resulted in a death-rate of 1 per cent.; but severe pitting, and in fact severe manifestations of the disease were present in a considerable number of cases. One of the deaths was of a premature infant at seven months, whose mother developed the disease six days before the birth of the child, the child having rash and papules.

Morse, of the State Board of Health of Massachusetts, sends a report of 394 cases in unvaccinated French Canadians, with marked pustulation and considerable involvement of the mucous membranes, but with no mortality.

Munroe, of Woonsocket, R. I., sends a report of 370 cases among French Canadians, the identity of the disease being doubted in the beginning, but eventually made by competent experts, five in number, including one from Montreal. The disease ran a somewhat typical course, the first hundred cases with, I believe, no mortality, the past two hundred cases presenting a death-rate of one in eight.

Dr. McDonald of Randsburg sends a report of about 200 cases characterized mostly by extreme mildness, and everyone typical of the disease as met with throughout the country. He was in a position to study his patients somewhat more closely because of the

fact that he dealt with most of them in a hospital; and he reports that in nearly all cases careful daily thermometer tests showed the presence of slight secondary fever. No cases presented in any patient recently successfully vaccinated or having a good vaccination scar of less than fifteen years' duration. He reports two cases of the eruption appearing in the posterior chamber of the eye, and the single death that he records is of considerable interest. The patient was a woman whose husband came to Randsburg, a distance of eighty miles, peddling, and surreptitiously visited the homes of some of the quarantined patients and then returned to his own home. In due time he developed the disease in an exceedingly mild, discrete form; and after the lapse of about two weeks his wife contracted the disease and died of confluent variola. The woman was a squaw, had never been vaccinated. He reports another case in which the patient, after convalescence from one attack, immediately developed a second one and passed through another typical siege of the disease. Photographs are very kindly supplied by Dr. McDonald, and are all of patients under his care.

Dr. Tebbe of Montague, Siskiyou county, reports the occurrence of the disease in a number of patients, attacking mildly two members of a family, and very severely one or two other members of the family at the same time, and in the severe cases running a typical course, ending in desquamation in the usual time and leaving marked pits. He reports one case presenting typical primary rash.

Wright of San Jose reports a series of 50 patients, 40 of whom were unvaccinated, 15 presenting severe manifestations, and 5 being markedly pitted. Two mild cases followed by paraplegia; one of his severe cases presenting a pustule on cornea, and one of the severe cases presenting miscarriage.

Dr. Jump of Fruitvale reports a series of cases at the Tesla Coal Mine traceable to the epidemic in Roslyn, which has been reported by Drs. Porter, Simonton and Sloan. In the epidemic at Roslyn, in Washington, we have a record of 1500 cases among miners, consisting chiefly of negroes, Poles, etc., people who have never been vaccinated, and during this epidemic there was no death due to the disease. However, at the Tesla Coal Mine, in Alameda County, we have a record of a case of smallpox developing in a negress who had left Roslyn eight days prior to the beginning of her illness. The eruption was marked, confluent upon the face; typical of small-pox even to the marked secondary fever and to very extensive pitting. Two other patients in this district were markedly pitted.

In my own work after having seen a considerable number of cases presenting those types which have become familiar to all of us, and

which at first seemed to be chicken-pox, I was called to see a woman suffering from all of the premonitory symptoms of the disease in severe form. The eruption which made its appearance was typical of the description which has been accorded to the disease in question; but upon the appearance of the pustules on the fifth or sixth day, marked secondary fever made its appearance; but this the health officer attributed to cold. The mucuous membranes were extensively involved, even to the conjunctiva, the patient being unable to open the eyes and breathing with difficulty. The patient went on to convalescence, and three months following the illness nearly a hundred well marked pits are in evidence upon her face. Three other cases in the same family at the same time presented the usual extremely mild type of the disease; they were not pitted; all the patients were unvaccinated. In another case a family of four children, about six months ago, were taken with an absolutely typical varicella, which cleared up in the course of a few days. Owing to the smallpox scare these children were all vaccinated, the vaccination taking in two and failing in two. Within the past month I have been called to attend these two unvaccinated children, suffering from an absolutely typical illustration of this modified smallpox.

These cases reported do not of course prove anything in the sense that a proper bacteriological test will sometimes do; but these and many others, of which time prevents discussion, go to show what is to be expected, viz: That here and there from the mild type of the disease eruptions typical of mild variola appear, proceed to complete development, and leave to their victims a legacy of pits to bear a lasting testimony to their visitation.

The final word has not been said in the matter of diagnosis of the disease. Something yet remains to be explained as to its contradictory manifestations in some vaccinated and unvaccinated persons. When another advance has been made into the field of bacteriology, which will identify the organisms at work in the various forms of variola and varicella, then the proof of the identity of the one or the other will rest upon solid ground and will be removed from the realm of speculation.

DISCUSSION.

Dr. W. T. Lucas, Santa Maria — I was very much interested in this paper of Dr. Crosby's, because I have recently had a very severe professional experience with this disease. I had 300 or 400 cases up to January, and had quite an experience with vaccination. I have lived here for 23 years and already vaccinated many of the people before. In '92 and '93 we had an epidemic among the railroad men, and the town was thoroughly vaccinated; and now out of 300 cases I did not have a single case among those whom I had vaccinated in '92. At the same time I had three families. In the first there were three children, none vaccinated. The father and mother had been vaccinated when children. I

was sent for and found the father broken out with smallpox. Also the mother. I vaccinated the children and none had the disease. I had another family of five in which I had the same experience. And yet another family of three. At the same time I had families where none had ever been vaccinated, and there would be one or two in the family who did not have it at all. In my community last June we had chicken-pox, and did not have the smallpox until August. There were some of those who had the chicken-pox who also had this other rash in the epidemic commencing in August.

Dr. W. A. Clark, Alameda. I believe it has been fairly well proven that one, two or possibly three attacks of smallpox can occur in the same individual. Also that after an attack of smallpox, vaccination can be successfully performed. You may wonder why it is that the people are taking any interest in a comparatively trivial disease. We are in rather a peculiar position inasmuch as our county health officer does not choose to call it smallpox; in fact, does not make a diagnosis. He says that the law only allows him to quarantine smallpox cases, and inasmuch as this is not smallpox he does not quarantine. In the city of Oakland there are comparatively few cases. In the city of San Leandro there have been about 518 cases. In the city of Haywards, where there is also a health officer, a like condition existed. Outside of the county there have been thousands—something like 2,000 cases. That in itself shows that the disease is highly contagious. If it is contagious, it is surprising that it does not raise the death rate, for you never hear of any deaths. It has been amply proven by the statistics of the Marine Hospital cases, that the death rate is $\frac{1}{2}$ per cent. If the disease is so terrible, why is it not quarantined? It has been proved by the report of the health officer that secondary fever does occur. It may be only 100. I believe that this is a subject that very much concerns us all. Dr. Osler in his letter, has said that fatal cases do occur. Why should we not meet the mild cases as we do the more serious ones? It is a question of great interest, especially regarding the diagnosis, and there is no difficulty for any physician in diagnosing typical cases. I have advocated the calling of all these cases smallpox.

Dr. Elizabeth Follansbee, Los Angeles. In regard to people having smallpox more than once, I will tell you an amusing little story. Dr. Roth told me that when he was in charge of a contagious hospital, there was an aged colored man working there as porter. Dr. Roth said: "Evidently you have had smallpox," and the man replied that he had had it twice. During the time that Dr. Roth was there the man had a third attack. About three or four years afterward Dr. Roth visited this hospital again, and while speaking to some one there he said: "By the way, there was an old negro porter here, while I was here before, I wonder if he is living yet?" The man replied that he was not living, that he died sometime before of smallpox.

Dr. J. T. Gardner, Brentwood. In my county we have an energetic health officer who insists upon calling everything smallpox. His diagnosis was objected to and Dr. R., of Stockton, saw all of his cases, and it was Dr. R.'s opinion and my own that they were all smallpox, for the patients all had the symptoms that we have heard spoken of. The treatment universally used is whiskey, strychnia, quinine and carbolic acid compresses.

Dr. E. von Adelung, Oakland. I have had quite a little experience, and I claim that there is a class of cases which lie between chicken- and smallpox, and it is impossible to diagnose until we have some bacterial test or the test of the vaccination after recovery

from the disease. We have to look upon it in a broad way. It is a disease which occurs mainly in adults. We also have a disease which is nearly always pustular and we know that in this disease the secondary fever is so slight that it is difficult to detect. Furthermore this disease which we are calling smallpox is a disease which rarely, if ever, occurs in successfully vaccinated people. The scar may result from an infected wound of the arm. Still we must remember that chicken-pox sometimes pits and sometimes we have deaths resulting from it. Another point is that it usually lasts 21 days and chicken-pox is limited to 10 or 12 days. Successive crops may occur in smallpox, but do not occur on the same portion of the body at the same time. In chicken-pox we find the developed bleb beside the beginning pustule.

Dr. D. Crosby, Alameda. The so-called dermatologists maintain that the germ for varicella and variola are one and the same. Whether that is true or not, it is certainly true that we are meeting, as Dr. von Adelung has just said, many cases which lie upon the border line and of which no man can say, this is one and this is the other. Furthermore, Welch, in his work, reports a large number of cases in which there is no secondary fever.

THE RAT AND HIS PARASITES; HIS ROLE IN THE SPREAD OF DISEASE, WITH SPECIAL REFERENCE TO BUBONIC PLAGUE.*

By B. J. LLOYD, M. D., Assistant Surgeon U. S. Public Health and Marine Hospital Service.

ALTHOUGH there are several hundred species of rodents included in the generic term *mus*, we need not, as a rule, concern ourselves with distinctions. The "Norway" or common brown rat (*Mus Decumanus*) is so well nigh universal and, unfortunately, so intimately associated with sanitary and shipping interests, and its habits are so nearly representative of the tribe, that we can practically pay our respects to the entire group in a discussion of this species.

The parasites to which I would invite your attention in this paper may be divided into trematodes, or flukes; cestodes, or tape-worms; nematodes, or round worms; protozoa, insects, and vegetable micro-organisms.

Trematoda.—Two flukes are mentioned by Cobbold as occurring in the long-tailed field mouse. These are the *Distoma Fitta* and the *Distoma Recurzum*. Dujardin describes the *Distoma Spiculator* as occurring in the common brown rat. No cases, so far as I can learn, have been reported in man, and they are probably confined to the rat and kindred rodents.

Cestoda.—No less than seven species of tape-worm are mentioned as occurring in the rat, and these are, without regard to the frequency of their occurrence, *Tenia Solium*, *T. Murina*, which is now regarded as *T. Nanna* of man; *T. Crassicolis*, *T. Leptocephala*, *T. Diminuta*, *T. Pusilla*, *T. Microstoma*, and perhaps others. In five hundred rats examined in San Francisco I have found

* Read before the San Francisco Microscopical Society.

no less than 170, or about 34 per cent., infested with tape-worms. These are usually encysted in the liver, sometimes as the ordinary cysticercus, but more often as an apparently almost mature adult worm. I have not attempted to identify the species, but in the specimens I have examined the head has four suckers and a double row of hooklets, usually about thirty-two in number, but there may be all the way from twenty-six to forty. The uterus and genital pore are usually poorly developed as compared with the human species. I have found as many as eight fair-sized worms in one liver, and to find two or three is quite common. In the intestines they occur with much less frequency, but in greater numbers, varying very much in size, from thread-like with few proglottides to a foot or more in length. Sometimes there are 40 or 50 or more in the small intestine. Many of those that I have examined exhibit the well-known six-hooked embryo, common to a number of species, and which can easily be demonstrated in the fresh egg.

Neamtoda.—One of the most common round worms occurring in the rat is said to be *Ascaris Oryzura*. Another species which is frequently found in the mouse is *Ascaris Tetraptera*. While I am not sufficiently acquainted with the subject of helminthology to be able to identify the different species, I have observed in the stomach of about 2 per cent. of the rats examined here a nematode which is certainly a species of the *Ascaris*.

The *Echinoryncus Moniliformis* occurs in the rat, and has also been reported as occurring in man.

The *Tricocephalus Nodosus*, the analogue of the *Tricocephalus Dispar* in man, is quite common in the rat and other rodents.

The *Spiroptera Obtusa* is frequently found in the stomach of the mouse in great numbers, and the *Olulanus Tricuspis*, which is found in the stomach walls of the cat, passes one part of its life history encysted in the muscles of the mouse.

The *Trichina Spiralis* occurs in the rat in both phases of its life history. The rat may be the original host, or may be infected by eating the excrement of the pig, or by ingesting the encapsulated larva in diseased pork. The rat, in turn, being eaten by the pig, is not an uncommon source of trichina in pork. In at least one outbreak of trichinosis in man, the rat has been regarded as the chief factor in the production of the diseased flesh.

The *Trichina Bakodyi*, which is said to be quite similar to but not identical with the *Trichina Spiralis*, has also been found in the rat associated with the *Trichina Spiralis*.

Embedded in the livers of about 65 per cent. of the rats examined in San Francisco, I have ob-

served large numbers of eggs, many of which resemble the egg of the *Tricocephalus Dispar*.

Protozoa.—The *Coccidium Oviforme* produces in the rat a disease of the liver which is described as consisting of "whitish nodules ranging in size from a pinhead to a split pea, the nodule being formed by a dilated portion of the bile-duct." This organism passes from the liver into the intestinal tract, and is discharged in the evacuations. Man is susceptible, but the occurrence of this disease in the human subject is comparatively rare.

The *Coccidium Perforans*, and the *Coccidium Bigeminum*, occur in the cells of the intestinal villi, and are described as separate organisms.

Trypanosoma.—As early as 1886, Crookshank described a flagellated protozoon in the blood of animals, some of which presented evidence of disease, while others did not. More recently it has been found that surra, a fatal disease of horses and mules in the Philippine Islands, is due to infection by trypanosomes. In various other localities, horses, cattle and dogs are attacked fatally. The bite of the tsetse fly in certain districts of South Africa, owes its well-known fatality to the fact that it conveys the trypanosome. Various other animals, including certain fowls, and more especially rats, harbor this parasite in enormous numbers, apparently without the slightest inconvenience. Forde, in 1901, at Bathurst, observed an organism in a human subject which was subsequently identified by Dutton as a trypanosome. Since that time a number of cases have been reported in man and one species has been "arrested on suspicion" as being the cause of sleeping sickness, and, apparently, a very good case is being made out with the mosquito as *particeps criminis*. The *Trypanosoma Lewisi* is the name given to the particular species which infests the rat, and, as I have specimens with me, I shall not discuss its morphology further than to say that it consists of a body, the length of which is about two and one-half to four times the diameter of a red blood cell; a flagellum, the free part of which is more than half as long as the body; and an undulating membrane, the upper free border of which is continuous anteriorly with the flagellum, and posteriorly with a deep-staining oval spot sometimes spoken of as the nucleolus, but more generally known as the centrosome. The long diameter of the centrosome is usually, but not always, at right angles to the body of the parasite. In the anterior part of the body is situated a larger refractile substance which is regarded as the nucleus. The breadth of the body of the organism is about one-half to two-thirds the diameter of the red blood cell. Out of 480 rats examined in San Francisco, I have found the *Trypanosome* in about 25 per cent., and

I have no doubt a more careful search than I have been able to make would reveal even a higher percentage than I have given you. In staining this parasite I commonly use Roux's double stain. While this stains the body, free flagellum and centrosome very distinctly, it rarely stains the nucleus or the free border of the undulating membrane. The infection, it is believed, passes from rat to rat chiefly through the agency of the flea. Experimentally, rats may be readily infected by inoculation or feeding. The organism may be kept alive in blood serum for a considerable period, and Novy reports having grown them in the water of condensation of a tube containing a mixture of agar and blood serum. A detailed description of this *Trypanosome* may be found in Bulletin No. 11 of the Hygienic Laboratory, P. H. & M. H. S. (Assistant Surgeon Edward Francis).

Insecta.—The only parasite I wish to mention under this head is the flea. A great deal has been said pro and con on the subject of whether or not the common rat flea will attack man. It has at last been fairly definitely settled that the rat harbors several species, and that some of them, at least, do attack man. It is quite probable that even those that do not bite man, if such there be, are not infrequently found on the body, and their mere presence is almost as much a menace as if they did, when the question of plague is considered. For the present, I shall only ask you to recall that the flea is believed to be an important factor in conveying plague from rat to man. Whether this is true or not I do not know. That the flea may convey living plague bacilli from rat to rat, from rat to man, or from man to man, I have no doubt; but that it is a common occurrence I am not convinced. Simond placed a healthy rat in a cage with one suffering from pest, the two being separated by a wire partition. Upon the death of the sick rat, the fleas left the body, as soon as it was cold, and attached themselves to the healthy rat, which subsequently became ill and died of plague. The intestines of such of these fleas as were examined contained numerous plague bacilli. A repetition of this experiment with two other rats, neither of which had fleas, failed to infect the healthy rat. From this he concludes that the healthy rat of the first experiment was infected by the fleas from the sick rat. Thomson believes that suctorial insects may convey plague by their bites, but not after twenty-four hours have elapsed since they fed on a septicemic host. The mere presence of an insect whose intestinal canal is gorged with plague bacilli is a menace, for you have only to crush such an insect on the skin to produce one of the known methods of infection. Apropos of this last statement, let me say by way of digression, that it is surprising that the mosquito has been

almost completely ignored by men who have studied the question of transmission in this disease. Malaria and yellow fever are conveyed by different genera of mosquitoes, but it is just possible that any mosquito *might* convey plague. On the other hand, more than 700 experiments by the Austrian Plague Commission with suctorial insects failed to produce a single infection. It must be remembered, too, that some cases of plague are never markedly septicemic and that the majority were only so within the last forty-eight hours before death.

Favus.—The *Aohorion Schoenlinii*, an intermediate form of vegetable parasite which causes favus, occurs in the rat and has been suggested as a means of extermination; but, as pointed out by Montenegro, only the weaker ones die and there is danger of infecting human beings, provided that human favus and rat favus are identical, and I presume they are.

RATS AND THE PLAGUE.

The main object of this paper is to bring prominently before you the importance of the rat as a factor in the spread of bubonic plague in insanitary habitations. In discussing this topic, I shall reverse the usual order and ask you to hear a conclusion before I have presented the argument. I regard it as a conservative statement when I tell you that, given a filthy and insanitary environment, the rat probably many times exceeds all other factors combined in the propagation of this disease. In order to discuss this conclusion, which is shared in greater or less degree by all men who have spoken authoritatively on the subject, it will be necessary to refer briefly, first, to the way in which the disease advances; second, to man himself as a source of contagion without the intervention of another host; third, the different modes of infection in human beings; fourth, sources of infection other than rats and man; and, lastly, to present certain well-known facts bearing directly on the subject of the transmission of the disease by rats. You will see by these headings that it is not my purpose to present to you a studied discussion of the disease itself. That would be too long a story. What I hope to do is to emphasize certain facts which should be known by everyone, from the ultra scientific to the "Man with the Hoe," and I want to say in this connection that from the questions asked daily by men who are otherwise well informed, I am quite certain that there is a big field for education along this particular line. I am making this statement advisedly and without meaning to cast the slightest reflection on the intelligence of our people, for I realize that they have not had the opportunity to obtain this information. Those of us who are here tonight are taking the trouble to inform ourselves and we understand, of course, that this talk is merely a means to an end, inas-

much as we hope to interest others, and in this way begin the dissemination of information which just now is of vital importance. To begin, then, it is a question whether we should regard pest as a disease of man or as a disease of rats which is readily communicable to man. It is just possible that the latter is the proper classification and that plague is primarily a disease of rats. Contrary to the general opinion, plague is a disease which progresses slowly, and only exceptionally and under circumstances with which we are none too familiar does it assume epidemic proportions. Having once gained a foothold, it plays hide-and-seek often for years, lulling its prospective victims into a false sense of security by the insidious nature of its encroachments. It is the general opinion of medical writers, however, that the city or province which harbors this infection will sooner or later be reminded in a very decided manner that the disease is not one that may be treated lightly. Whether we are able, with our present knowledge of the disease and with our improved ideas of sanitation, to prevent in the future what has inevitably resulted in the history of this disease in the past, remains to be seen. I believe that if what we know is put into practical execution, this can be done. As an example of the slow and deadly march of this disease, I have to read to you this extract from the mortuary statistics of the city of London:

In the year 1616 in London there were 9 deaths from plague; in 1617, 6 deaths; in 1618 18 deaths; in 1619, 9 deaths; in 1620, 21 deaths; in 1621, 11 deaths; in 1622, 16 deaths, in 1623, 17 deaths; in 1624, 11 deaths; in 1625, 35,417 deaths; in 1626, 134 deaths; in 1627, 4 deaths; in 1628, 3 deaths; in 1629, 9 deaths; in 1630, 1317 deaths.

To sum up, in a total of fifty years of plague in London, from 1601 to 1650, in twenty-five of these years the deaths numbered from 1 to 67 per annum, in eleven other years the deaths numbered from 134 to 996, while in the years 1603, 1625, and 1630, the deaths numbered respectively 36, 260, 35,417 and 10,400, these being the largest numbers occurring in one year. If further evidence is wanting, I have to refer you to the number of cities that are known to be infected today, and remind you that nine-tenths of them are having only a few cases a month, and some of them only a few cases a year. Recognizing, then, the tortoise-like pace set by this disease, and not forgetting that it may shake off this lethargy and advance by leaps and bounds, let us consider man himself as a source of contagion. It is a common error of belief almost universal among non-medical men and even among many otherwise well-informed physicians, that plague is highly contagious. Except in the pneumonic form, which constitutes less than 5 per cent. of all cases, and which differs in no wise from the bubonic type, save in the part of the body attacked, plague can

hardly be regarded as contagious. This does not apply to the handling of the internal organs with the bare hands, as some have found to their sorrow in post-mortem examinations, but refers to contact with the exterior of the body of persons suffering from, or dead of, plague. It is a well-known saying that there is no safer place in a stricken city than a sanitary plague hospital, and this saying is literally true. The following opinions on the subject are culled from Thompson's "Treatise on Plague," and are compiled by him from the writings of men whose experience and ability are too well known to be questioned, whatever may be thought of their conclusions. Dr. Robertson, a British medical officer in Syria in 1841, writes:

In reference to the contagiousness (transmissibility) or non-contagiousness of this disease, I beg to state that the result of all my experience leads me to believe that the disease originates in local causes, and that it is not highly contagious. My firm conviction is that the plague cannot be communicated from one person to another in a pure atmosphere, even by contact, but I am not prepared to assert that, if plague patients are crowded together in confined and ill-ventilated apartments, infection will not be produced, just as in typhus.

Mr. Brant remarks:

As far as my experience goes, I have been led to doubt the contagious nature of the disease, or, if contagious, it must be in a very slight degree. I have had within the sphere of my observation many cases of the most complete and extensive contact, without the disease being communicated.

Sandison, of Brussa, says:

The cases are numerous in which persons escaped the disease after contact with persons seized with it, even in its most malignant form.

Clot-Bey, with his corps of French physicians, "remained in hourly contact with the infected for weeks together and with but one of them taking the distemper." The Royal Academy of Medicine of France, in 1844, after a thorough and exhaustive search in Egypt, reported: "There is not a single fact which indisputably proves the transmissibility of the plague by mere contact with the sick." The experiences of more recent writers on this subject coincide with those of the writers quoted and corroborate their views. Before leaving the subject of man as a source of contagion, it must not be forgotten that under conditions of overcrowding and poor ventilation, human cases may be of considerable importance in producing the disease in others directly. Living in houses where there is plenty of sunlight and fresh air, with proper disposal of sewage, these same human beings can come in daily contact with plague cases with comparative immunity.

(To be continued.)

Note—Dr. B. J. Lloyd, author of the foregoing paper, is at present stationed at Callao, Peru.—Ed.

WHAT CAUSES APPENDICITIS?*

By D. A. STAPLER, M. D., San Francisco.

THE subject of appendicitis has been so often discussed that it requires a great deal of courage on my part to bring it before this society for further consideration. All of you have seen many cases of appendicitis, have formed your own conclusions of the nature and treatment, and each of you is so convinced that his opinion is the correct one, that I am simply putting my hands in a hornets' nest when I attempt to modify these ideas.

My position in presenting a new explanation, based entirely on comparative studies in pathology, is made all the more difficult by the lack of clinical material, hospital- and laboratory-facilities. But we often make a diagnosis where the chief symptoms are absent, guided only by our medical intuition and where the clinical observation proves the correctness of our judgment.

Before considering this matter I would like to state that the term appendicitis is a misnomer. Appendicitis means inflammation of the appendix; but the anatomists know only the *appendix epiploica* and a *processus vermiformis*. Therefore an inflammation in this organ should be termed epi-para or perityphlitis. I will employ the term appendicitis, however, the long use of which has established itself *ex abuso*, because this word brings immediately before your mind's eye the entire picture of this disease in its manifold forms and variations—you know them all.

But what causes appendicitis? Many have not thought at all about this subject; some have investigated the matter and formulated theories even as grotesque as they are contradictory. When we find many theories, we may be sure that none are correct, just as many remedies for one disease is proof of the inefficiency of them all. If one theory is correct, why formulate new ones?

The old theory, endorsed by such an eminent man as Billroth, was that appendicitis is caused by foreign bodies. Cherrystones, fishbones, etc., were searched for, and when, instead of cherrystones, etc., fecal concretions were found, the latter were considered the cause of the disease. In the meantime, the operation for appendicitis became more frequent and many of the extirpated *processi vermiformes* contained neither cherrystones nor fecal concretions. What caused the inflammation in these cases was the universal question. Others stated that small microscopical particles of agateware or oystershells found their way into the *processus vermiformis* and produced the disease. In other instances *ascaris lumbricoides*, *oxyuris vermicularis* and *trichocephalus dispar* were found.

How do fecal concretions develop in the pro-

cessus vermiformis? I believe that every peristaltic impairment is capable of producing fecal concretions. The feces enter the *processus vermiformis* just as readily as other parts of the intestines, but escape with more difficulty because the peristaltic power is here weaker and the canal has no distal opening. It is only necessary that the peristalsis be impaired or entirely absent for a few days, as occurs in cases of peritoneal irritation, for the feces to remain dormant in the *processus vermiformis*. They become harder and the re-established peristalsis can only with much difficulty expel them. Small particles, however, remain, become harder and harder, and a fecal calculus is formed. In a case of extrauterine pregnancy I had the opportunity to observe the formation of such a concretion. The patient showed, following an internal hemorrhage, signs of peritonitis, suppression of stool and gas. These symptoms disappeared in a few days and 12 days later the patient consented to an operation. I found that the *processus vermiformis* was partially filled with feces; the cecal end contained soft matter, which was segmented by the peristalsis, while in the distal end the fecal contents were hard. Such a concretion could only be removed by operative intervention. The development of fecal concretions is therefore very simple and comparatively frequent. That fecal concretions are not the real cause of appendicitis is proven by the fact that we find them present in only about 20 per cent. of the patients operated upon.

It is not my purpose to here enumerate all the theories; suffice it to say that many claim to have found the key in the histology of the *processus vermiformis*, others in its anatomy. The artery which supplies the *processus vermiformis* was by some held responsible for the mischief. Others claimed it depended upon the length of the *processus vermiformis*. Some assert that its various positions is the sole factor causing disease, others swear it is nothing but a retrograde metamorphosis. Again some few see in the pressure of the kidney upon the *processus vermiformis* the explanation, and so the theories pile up upon each other *ad infinitum*. My attempt to collect the literature published upon this subject encountered such voluminous and contradictory material that I gave up in despair. Is any one of the numerous theories correct? I think not, although each of these conditions above quoted may have some slight influence in producing the disease. In my opinion, there is but one cause for appendicitis; namely, *loss of tissue and subsequent infection*. The fecal concretion is not the cause of appendicitis, but produces a lesion of the tissue, which becomes subsequently infected. If no infection ensues, then the fecal concretion or foreign body causes no further trouble. We find the same in gallstones. Gallstones may be

* Read before the San Francisco County Medical Society.

carried during a lifetime without any inconvenience. Indeed, they are so common that we find them in 10 per cent. of autopsies. Only when infection occurs do they become a source of disease. How can the length of the processus vermiformis be held responsible for its inflammation? Or its blood supply, its histology or its anatomy? According to what law? Do we find any analogy in pathology for this?

Nowhere in surgery does one find infection occurring without a primary lesion. No surgeon of today accepts the old ideas about idiopathic erysipelas or tetanus, because he knows that a point of entrance, be it even so small that it escapes discovery, is necessary to make infection possible. Normal skin and normal mucous membranes are not penetrable by infectious germs. Only in appendicitis do we attempt to make exception to this law. Why? How does the lesion in the tissue occur? In many ways. It struck me that more boys than girls, more men than women were afflicted with appendicitis, which disease is more prevalent in America than in Europe. These facts started me to thinking, especially as appendicitis in women should be relatively more frequent, owing to the neighboring adnexa, so frequently diseased. This is not the case, however. Further, I was impressed that nurses in a certain hospital, who lifted the patients upon the operating-table, were frequently attacked with and operated upon for appendicitis. Upon further investigation, I found similar conditions in another hospital. It is a fact that appendicitis is frequent among students of Stanford University. Cases of appendicitis following traumatism, as a blow, lifting a heavy weight suddenly, etc., are not rare. In the above mentioned cases the loss of tissue was produced by capillary hemorrhages through overexertion and the subsequent infection developed the appendicitis. By means of this assumption we can explain why more boys than girls, more men than women, more here than in Europe suffer from appendicitis. Boys expose themselves more to physical overexertion than girls. The same applies to men, and the fact that physical sports are more cultivated here than in Europe accounts for the greater frequency of appendicitis in America. The fact that capillary hemorrhages may occur after physical overexertion is well known to oculists. Rupture of the conjunctival capillaries follows such efforts as severe coughing, sneezing, straining by stool or lifting heavy weights quite commonly. Such a capillary hemorrhage may likewise occur in the processus vermiformis through sudden increase of the intraabdominal pressure, and indeed here more readily when such predisposing conditions as abnormal position, shape, blood supply and histological structure are present. It is, however, not necessary to assume that these small hemorrhages occur more frequently in the processus

vermiformis. They may as well occur in other parts of the intestinal tract, but here no further complications ensue. And this is readily explained. The intestinal tract is an open canal, while the processus vermiformis is a blind sac. In the former the normal secretion of mucus is considerable and the contents are kept in constant movement, while in the latter peristalsis is slow and the liability to infection is considerably greater. We may compare the conditions existing in the processus vermiformis with those in a fistula. A fistula seldom heals unless converted into an open wound, because the secretions collect, producing constant irritation. All these conditions favor infection of the processus vermiformis. The severity of the disease will depend upon the nature of the infection.

The foregoing theory readily explains why infectious diseases such as tonsilitis may sometimes be followed by appendicitis. Pathology teaches us that internal capillary hemorrhages in different organs occur in the various infectious diseases. Thus in scarlet fever we find hemorrhages in the kidneys and intestines, in acute articular rheumatism hemorrhages in the mediastinum, peri- and endocardium, the pleura, the spleen and the serosa of the intestine are frequent; also, in influenza effusions of blood occur in different organs. These hemorrhages result from the action of the toxins and can be secondarily infected by the same germ which caused the original disease, as, for example, streptococci, or more commonly, the bacterium coli. There remains now but to explain the appendicitis due to foreign bodies. This is also quite simple. If the foreign body is sharp, the mucosa is easily wounded and the ever-present coli bacillus will cause the infection. If the foreign body is dull, it may cause a pressure necrosis, thus making infection possible. The development of chronic appendicitis with acute exacerbations finds also its natural explanation. The primary lesion is infected with germs of moderate virulence. In the ensuing battle nature obtains the upperhand and the acute attack subsides. The lesion, however, does not heal, but is transformed into a small, granulating ulcer (I beg you to remember that the conditions in the processus vermiformis are similar to those in a fistula). Any new irritation of this wound will facilitate another infection and therefore a fresh attack. Should, however, this little ulcer heal entirely, then a scar forms with subsequent stenosis. If infection takes place through highly virulent germs, then the whole processus vermiformis is converted into a phlegmon. Summing up, *appendicitis is caused through loss of tissue with subsequent infection. This loss of tissue can be caused by capillary hemorrhages due to infectious diseases or overexertion, or by foreign bodies.* No appendicitis without infection, no infection without loss of tissue.

THE LEGAL DEFINITION OF THE PRACTICE OF MEDICINE.

By WILLIAM C. TAIT, Ph. D. (Tubigen), LL. B., San Francisco.

THE State Board of Medical Examiners recently acquired the bulletins of the American Academy of Medicine, a valuable acquisition, because the bulletins deal largely with the subject of medical legislation and report the transactions of the National Confederation of State Examining and Licensing Boards, an organization which meets annually and whose sessions are usually opened with prayer and the address of a Governor or Mayor. In one of these bulletins, that of June, 1902, is found a paper read before the Confederation by Dr. Henry Beates Jr. of Philadelphia entitled: "How Should the Practice of Medicine be Legally Defined." After tracing the origin and growth of medical legislation in this country and taking a fling at the medical colleges whose breach of trust had necessitated the establishment of boards of examiners, Dr. Beates stated that the purpose of our medical practice acts had been defeated and their execution paralyzed by the prevailing judicial interpretation of what constitutes the practice of medicine—hence the necessity of seeking from the legislature a definition broad enough to make these acts effective. The object of the paper was to secure the adoption of a definition which he had formulated, first by the Confederation, then by the profession, which in turn should seek to conventionalize it so that its enactment into law would naturally follow. Dr. Beates had submitted his definition to the members of a number of examining boards, who had endorsed it, and he gave it out as technically perfect. The Confederation, although admitting the necessity for a more scientific definition of the practice of medicine by the legislature, nevertheless failed to adopt that of Dr. Beates, perhaps wisely, too, for the definition proposed was far from being technically perfect. It lacked the supervision of an expert, and I think it would have been wiser to have first submitted it to a confederation of attorneys for boards of examiners.

According to Dr. Beates the legal interpretation of what constitutes the practice of medicine and which has played havoc with the laws regulating its practice is as follows: "To practice medicine is to treat diseases and accidents by means of drugs or medicines, and if the treatment of these is conducted without drugs or medicines, one so doing is not practicing medicine." If we add to the above that the practice of surgery, as defined by certain courts, consists in the treatment of disease or disability by means of the knife, or other surgical instruments, we will have an idea of the narrow and false construction put upon these terms by certain courts. I say by certain courts, because there are many exceptions to the rule, if indeed it can even be called a rule, so numerous are the exceptions. That such an interpretation robs the acts of their intended purpose is obvious enough. Dr. Potter of Buffalo, New York, told the Confederation how it had worked in his state:

Again, in the state of New York we labor under this difficulty. A good many years ago a very eminent justice of our supreme court expounded the law in a decision which he elaborated with learned and legal phraseology, the essence of which was that the practice of medicine must consist in the prescribing of drugs, and, as in the case before him, no drugs were prescribed, the party could not be held for a violation of the law. That stands as an interpretation of the present statutory law of the state of New York, and if any prosecution is attempted by a medical body or anybody else, or if any person interested in this question goes to any district attorney in the state of New York for information on this point, he will say: "That is the interpretation of the court on the subject,

and I cannot aid you. I cannot bring action in this case because it will certainly go against you. I cannot consent to bring action in any case where the decision of the court is so directly against the proposition that you present. So there you are."

Dr. Potter probably had in mind the case of Smith vs. Lane 24 Hun. 632, decided by one of the supreme courts of New York in 1881, a case always cited by such courts as favor the narrow construction. This decision, which worked such disaster, probably came unexpectedly, for by the looks of the record the case seems to have gone by default as far as the medical profession was concerned, and, although the medical act was directly involved, neither board of examiners nor the people, were parties to the proceeding, which was a suit by a quack to recover a stipulated sum for services in rubbing and kneading the bodies of the defendant and his wife. The plaintiff claimed that no license was necessary because the services rendered were not medical, and the court so held, because the plaintiff's methods were drugless and knifeless, and therefore in its opinion harmless. The purpose of the statute, said the Court, was to protect the people against the danger to life and health from the administration of potent drugs and medicines by ignorant and incompetent persons. Credulous people, might, it was true, be deceived into the employment of plaintiff, and thus be imposed upon, but the object of the statute was not to protect the ignorant and the credulous against deception and fraud.

The plaintiff had judgment, and his victory meant the repeal of the medical law as to every empiric who used neither drugs nor the knife. The judgment should have been for the defendant, for the relations of the parties were those of physician and patient. The defendant had employed the plaintiff to treat him "for his bodily infirmities." The dictum was that neither harm nor benefit could result from rubbing and kneading the body. The harm and the danger contemplated by the statute were such as are apt to arise when unlicensed and therefore unqualified persons undertake to treat the sick and to act as physicians. What would the eminent Judge have thought of the following case reported by Dr. Mathews of Louisville during the discussion:

Permit me just a moment to narrate a trial that occurred in our court a few weeks ago, in which the decision was in our favor in the lower court by a most learned judge, but was reversed by our Supreme Court in a few weeks thereafter. I had the lawyer to ask the osteopath, whom I had arrested and tried, if he treated, for instance, diphtheria? He said he did. I had him ask, "How did you treat diphtheria?" He answered, by the introduction of the hand into and down the throat and manipulating the throat. I then asked Professor Bailey, a learned physician of our city, and who is professor of practice of medicine in the University of Louisville, what such treatment would do? He answered it would kill the infant invariably. In answer to a proposition of the lawyer who was defending this man, we asked Dr. Vance, a distinguished surgeon, if he had not had many cases in surgery in which he did not administer a single dose of medicine. He said that it was his common practice to reduce fractures, dislocations, etc., and possibly never administer any medicine at all.

Perhaps the New York judge might have gone to that length, as did the Supreme Court of Kentucky in the case of Nelson vs. State Board of Health, which took the law from him, and violated not only the spirit of the medical practice act, but also its very letter. In Kentucky, the Legislature had exacted of all would-be practitioners a diploma satisfactory to the State Board of Health, and this Board recognized only such medical colleges as conformed to the standard prescribed by the Association of American Medical Colleges. The profession was not a house divided against itself, as it often is, but was united in a common endeavor to uphold the medical law, and to make it respected. All went

well until an osteopath obtained an injunction restraining the board from prosecuting him. He had a diploma from an osteopathic college, and by his ingenious counsel asked the court to either compel the board to recognize his college as reputable, under the statute which expressly prohibited discrimination against any system or school of medicine, or, if his system was medicine, to enjoin the board from interfering with him. The court preferred the injunction to the mandamus. It said that osteopathy, which it called a new system of treating disease, was not medicine, nor was plaintiff's college a medical college in spite of its clinics and infirmaries, because it failed to teach surgery, therapeutics, materia medica and bacteriology; nor was plaintiff a physician, but a nurse, or a laborer like any other, because he used neither drugs nor the knife. In vain the board's attorneys pleaded that the practice of medicine was not confined to the use of drugs, or surgery to the use of the knife; that medical colleges taught other things than the application of drugs to the cure of disease. The Court insisted that the Legislature had intended to regulate only the practice of medicine and surgery by physicians and surgeons, as the people and the Court understood those terms, to prevent empiricism on the part of these persons. Yet the title of the act was "An act to protect the citizens of this commonwealth against empiricism," and the Court itself defined empiricism as ignorant or unscientific practice. The act defined the practice of medicine as follows:

Sec. 2618. Any person living in this State, or any person coming into this State, who shall practice medicine, or attempt to practice medicine in any of its branches, or who shall treat or attempt to treat any sick or afflicted person by any system or method whatsoever, for reward or compensation, without first complying with the provisions of this law, etc. To open an office for such purposes, or to announce to the public in any way a readiness to treat the sick or afflicted, shall be deemed to engage in the practice of medicine within the meaning of this Act.

How in the face of such a definition the court reached the conclusion that the accused was not practicing medicine is inconceivable. The definition which was added to the medical statute in 1893 would seem to have been enacted for the express purpose of averting the danger of an interpretation similar to that of New York and a number of other states. In North Carolina the fate of the law was equally strange. There the Board of Examiners was appointed by the State Medical Society, an association of "regularly graduated physicians," which was expressly required to appoint seven regular physicians (not as in California where the state societies may elect from the ranks of the profession at large) and the law exacted a diploma based upon a three years' course of study, and an examination before the board. It did not define the practice of medicine, other than to exempt gratuitous services. Here, as in Kentucky, the law was overthrown by an osteopath who, during the course of treatment otherwise osteopathic, opened a small abscess in the patient's mouth with a knife, but exacted no fee for this last service.

The osteopath also filed a brief himself in which he claimed that "to deny the right to the free and untrammelled use of one's hands upon the body of a sufferer, for his benefit, at his request is to deny constitutional right." The Court said that the Legislature had never intended to require an examination for "a profession which eschews the use of drugs and surgery," or to exact of such a person as the accused a knowledge of anatomy, physiology, surgery, pathology and the other subjects enumerated by the statute, almost all of which would be useless knowledge to exact of an osteopath who prescribes hot and cold baths, rest and exercise, besides rubbing

and kneading the body. In the opinion of the Court, the Legislature had only regulated "allopathy," but had not restricted the practice of medicine to that system, and, besides, the defendant was not a physician, although he styled himself a doctor. The board's attorney cited the Alabama case of Bragg vs. The State only just decided, which held precisely to the contrary, but the logic and authority of the Alabama court made no impression upon the court of its sister state. Yet what was plainer than that the Legislature had intended to intrust the practice of medicine only to those who could pass an examination in the branches constituting the science of medicine, and which it especially enumerated?

The Court refused to attach any importance to the fact that the defendant advertised himself as "Doctor," for "Doctors" were apt to be as thick as leaves in Villambrosa. The statute did not deny the use of this title to the empiric, as it does in California. The effect of this decision must have been to render that title as contemptible and common as it will be in California, should those who would like to make it so succeed in overthrowing the medical act.

As we have already said, there are many exceptions to the "interpretation" given by Dr. Beates as the rule. The most notable, besides the instances of Illinois, Nebraska, and Rhode Island, are those of Alabama and Indiana.

Down in Alabama the Legislature created boards of examiners out of the State Medical Society and the county medical societies in affiliation with it, and this delegation of power to the official organs of the profession, under a statute which provided for a diploma and an examination before one of the boards, but did not define the practice of medicine, was the means of uniting the profession against adverse legislation and quackery. In Alabama the courts have not, as in New York, Kentucky and North Carolina, done violence to the will of the Legislature, but have upheld the spirit and the letter of the medical law.

In the case of Bragg vs. The State (59 L. R. A.) decided in 1902, the Supreme Court sustained the conviction of an osteopath for the illegal practice of medicine. Contrasting regulars and osteopaths, the court declared that, although their methods differed, yet both were physicians because both sought the same result, viz: the alleviation or cure of disease; both, in fact, practiced the healing art. It defined medicine as the art or science of diseases and remedies, or as the healing art. The history of medicine and therapeutics was traced to show that the physician had in no age followed a uniform system of therapeutics, that medicine as practiced in every age had never confined itself to the use of drugs and the knife, as pretended by the accused; that the term physician was broad enough to include and did include "all those who diagnose disease and prescribe or apply therapeutic agents for its cure." The decision is so admirable that I am tempted to give it verbatim. It is a complete answer to the adverse decisions of other courts by a learned jurist (Judge Tyson) who, like Judge Field of the United States Supreme Court, has the proper conception of the science of medicine, of the duty of the Legislature to so regulate it that the people may not be injured, deceived or duped by pretenders and impostors, and of the duty of the courts to uphold the policy of the Legislature to that end. The decision will delight every physician who has at heart the interests of his profession and the welfare of the people, and, therefore, hates every species of quackery.

In Parks vs. The State, (59 L. R. A. 199), decided the same year, the Supreme Court of Indiana was equally scientific, although construing a statute which defined the practice of medicine in the broad sense.

The accused, who was a magnetic healer styling himself "Professor," denounced the state law as "an attempt to determine a question of science and to control the personal conduct of the citizen without regard to his opinion and in a matter in which the state is in no way concerned."

We think, on the contrary, said the Court, that the matter is one of considerable concern and that the Legislature is the appropriate tribunal to determine the degree of learning that those who gain a livelihood by seeking to relieve the bodily ailments of others should possess. The legislature confined the use of the magnetic system to a body of men in whose hands it would be safe to intrust it because of their education in subjects relevant to its administration, and was justified in taking it, on account of its danger, out of the hands of empirics.

If a man holds himself out to the community as a person skilled in the science of healing and on that ground seeks the opportunity to exercise the skill he claims to possess, his business becomes impressed with a public character and is therefore subject to reasonable regulation in its prosecution.

Particularly happy is the conclusion of the court that the accused was an empiric because he had no license. That the Von Tiedemanns, Herbeins, Gardinis, Gerinos, Martins, and others of the same ilk who have been arrested for their continued violation of the medical act are not quacks because they have medical diplomas, is a favorite argument of their respective counsel. They are quacks nevertheless as well as law breakers, for now that we have boards of examiners in the United States to pass upon the qualifications of would-be practitioners the title of M. D. carries with it no guaranty of learning or skill. The only evidence of these is the license or certificate. Empiricism means nothing if it does not mean ignorant or unscientific practice, and the man who practices without a license may therefore very properly be called an empiric or quack. By those terms we used to mean a practitioner without a medical degree. Today we use them to designate the practitioner without a license.

Our medical practice act provides that no one shall practice medicine or surgery in this State without the certificate of the present or of some former Board of Examiners, and makes it a crime for any person without such a certificate to represent or hold himself out as a practicing doctor, physician or surgeon. The titles of doctor, physician or surgeon, therefore imply something more than the possession of a medical degree. They imply that those who use them are duly qualified to practice medicine. As Judge Field said in *Dent vs. West Va.*:

The physician must be able to detect readily the presence of disease, prescribe appropriate remedies for its removal. Everyone may have occasion to consult him, but comparatively few can judge of the qualifications of learning and skill which he possesses. Reliance must be placed upon the assurance given by his license, issued by an authority competent to judge in that respect, that he possesses the requisite qualifications. No one has a right to practice medicine without having the necessary qualifications of learning and skill and the statute only requires that whosoever asserts that by offering to the community his services as a physician that he possesses such learning and skill shall present evidence of it by a certificate or license from a body designated by the State as competent to judge of the qualifications.

According to Judge Field, the Legislature in providing these medical practice acts pursued a double object, to protect the people against "the consequences of ignorance and incapacity," and against those of "fraud and deception."

Such was the intention of our Legislature in providing by the first subdivision of section 16 defining the practice of medicine that "those who profess to be, or hold themselves out as being engaged as doctors, physicians or surgeons in the treatment of disease, injury or deformity of human beings" shall be deemed as practicing medicine or surgery. This is one of the most important features of our medical

practice act. Many other states have a similar provision, although differently expressed. Some of them prohibit the opening of an office, the announcing of a readiness to treat the public by any means whatsoever. Our own statute is not so broad. Here empirics of every class may announce themselves as healers or professors, provided, however, they do not use the titles of doctor, physician or surgeon, and do none of the acts enumerated as constituting the practice of medicine and surgery. The reason is obvious. An empiric must be known as such, otherwise the public is deceived. It is the word "doctor" or "physician" which alone wins the confidence of the great majority of men.

As Goethe makes Mephisto say to the pupil:

Ein Titel muß sie erst vertraulich machen,
Daß eure Kunst viel Künste übersteigt;
Zum Willkomm tappt ihr dann nach allen Siebenjachen,
Um die ein Anderer viele Jahre streicht,
Versteht das Pflaster wohl zu driiden
Und fasset Sie mit feurig schlaumem Blicke
Wohl um die schlante Hüfte frei
Zu sehen wie fest geschnürt sie sei.

A FEW REMARKS ON THE TREATMENT OF PRIMARY GLAUCOMA.*

By C. S. G. NAGEL, M. D., San Francisco.

THE brilliancy—in the widest possible interpretation of the word—of Von Graefe's iridectomy for glaucoma, has not been dimmed by the test of time. That there are cases in every class of primary glaucoma not cured by the operation was known to the great clinician himself, who for nearly fifteen years had practised the operation almost daily. And though one can hardly say, considering the subject as a whole, that the pendulum has ever swung in the opposite direction, still, for a time, there has been some impression abroad, under the influence of other meritorious measures amongst other reasons, as if iridectomy had been somewhat overrated.

Without discussing then the *exact* moment when to do iridectomy in cases of acute inflammatory glaucoma, we may confidently believe with Von Graefe and Arlt that in case of a first attack, even with quantitative perception of light only remaining, *restituto ad integrum* will result from the operation as long as it is done not later than about 14 days after the onset. Taking this as a basal fact, and being in accord with the anatomical findings in cases of iridectomies performed early as well as later, there can be no other conclusion but that in inflammatory glaucoma, acute as well as chronic, we must operate as early as possible, eventually even during the prodromal stage, e.g., if the fellow-eye should already have been injured seriously through the disease. The better the field of vision and the appearance of the papilla, the better the prognosis—where there is only eccentric vision left, the preservation of such through iridectomy becomes doubtful and improvement is no longer to be looked for.

* Read before the San Francisco Society of Eye, Ear, Nose and Throat Surgeons.

Cases of glaucoma fulminans are exceptionally rare. Absolute amaurosis sets in during a few hours in apparently healthy eyes. There iridectomy has only been of more or less benefit during the first two or three days. With regard to the technique the writer would only like to point out that according to Schmidt-Rimppler traumatic cataract need not necessarily be due directly to the instrument of the operator, but that with the humor aqueous escaping suddenly and the lens coming forward abruptly, a spontaneous rupture of the capsule, particularly in the equatorial region, may happen. In support of this statement the author quotes cases in which, soon after the operation, there had been capsular cataract in the periphery of the lens, and which then remained stationary. At any rate, this might be considered a further reason to avoid quick escape of the aqueous. With a view of possibly avoiding or lessening retinal hemorrhages, at the Breslau University Eye Clinic, we were wont to have pressure applied to the bulbus by an assistant prepared therefor, immediately after the finishing of the kerato-sclerotomy. A prognostic point not sufficiently known, I believe, is the following:

If after iridectomy the tension be not analogous to the one you would expect following an operation on an eye with normal tension, the curative effect of the operation is doubtful, and the restoration of the anterior chamber will be slow. I should like to just mention that Goldzieker throws out the suggestion that possibly pulling the iris during the operation may have a curative effect, similar to the one in surgical operations on nerves. Arguing from his anatomical findings Treacher-Collins recommends tearing the iris off its root with a view to freeing Fontana's space the more securely, as had been practised already by Bowman. The advantage of this procedure would appear to be that an extremely peripheral incision is not necessary, thus avoiding the possible prolapse of ciliary processes. The conclusion of Treacher-Collins' argument is also for the earliest possible operation. I find in Professor Snellen's recent publication on eye-surgery that he claims prognostic value of favorable portent for the appearance of higher astigmatism after the operation. Adopting Priestley-Smith's well-known theory of the lessened perilenticular space in glaucoma he argues that appplanation of the cornea towards the incision implies estasia of the bulbus in the ciliary region, which process the ciliary body is bound to follow, thus filling the perilenticular space. The conviction that in every case of primary inflammatory glaucoma iridectomy is indicated at the earliest has been finally supported by the statistics of Hirschberg and Haab, confirming the frequent absoluteness of the cure effected, in instances up to 32 years. The older the case of

standing the less favorable it becomes prognostically, and the more the chronic inflammatory glaucoma loses its inflammatory character, leading over glaucoma simplex, the less can we rely absolutely on iridectomy alone.

Regarding simple glaucoma, the older Von Hippel has absolutely recommended iridectomy at the earliest. Still I am inclined in these cases always to do sclerotomy first, considering in cases of increased tension a subsequent iridectomy; necessary if the bulbus remains more resistant after sclerotomy than would be the case with a bulbus of normal tension. Whilst assistant with Pflueger, of Berne, I have done sclerotomy with implantation of a conjunctival flap in order to the better secure a filtration-cocatrix.

In conclusion I quote from Ziehe-Axenfeld's, the most critical publication extant on the subject, concerning 74 cases of sympathectomy. My own experience of the operation is very limited. They say, in general, sympathectomy is not indicated before iridectomy, the only exceptions would appear to be if iridectomy has done harm in the fellow-eye in cases of hemorrhagic glaucoma, or in glaucoma simplex with extreme deterioration of sight.

NOTE—At the coming meeting of the State Society there will be presented a symposium on Glaucoma—ED.

NEURALGIA AND SOME OF ITS CLINICAL FEATURES.*

By PAUL SANFORD, M. D., San Jose.

IF we accept the analysis of the word neuralgia for its definition, we will find that it falls short of the generally accepted meaning of the term. The term neuralgia is so firmly fixed in our nomenclature, however, that instead of discarding it altogether, it can be, and is modified so as to more specifically express our meaning, by using the suffix algia in connection with the name of the part or parts, which is the seat of pain, as cephalgia, cardialgia, etc. Then again, some pathological conditions accepted as neuralgia have distinct names no way associated in its nomenclature with the term neuralgia, viz: tic douloureux, sciatica, etc. Again, if we note the specific meaning of the word neuralgia, we see that we are yet unfortunate in its inability to accurately convey its true meaning. We are not sure whether algia (pain) is a distinct condition itself, with the nerves subservient to carry the impressions to the sensorium, or whether it is a quality of some other sensation. Dr. Collins, of New York, defines neuralgia as a symptomatic pain, dependent upon functional or organic disease of the sensory neuron, particularly the peripheral sensory neurons.

The cause of neuralgia may be both traumatic and idiopathic. The principal factors of the lat-

* Read before the Santa Clara County Medical Society.

ter are age, sex, heredity, exposure, and any condition that lowers the vitality of the individual, and deprives the nerves of the proper amount of nutritive element, such as auto-intoxication, indigestion, non-assimilation, infection, syphilis, influenza, etc. In auto-intoxication the organs themselves may be derelict in their duties, from pathological causes, or simply overtaxed in their work of eliminating poisonous products from the system. We see this very marked in those individuals who through hurry and rush of business haven't time, or don't take time, to properly masticate their food. Or more frequently, by those who live to eat and not eat to live, and whose happiest hours are spent at the table. I believe this is directly and indirectly the cause of more neuralgia than is generally believed, especially sciatica and its complement, lumbago. It has been said that if a man eats too much, he has dyspepsia, grows fat, or breaks out with boils. I might add with the same degree of truthfulness, contracts neuralgia.

The subjective symptom of neuralgia is pain, its character depending upon the cause, nature and location. The description of the pain varies according to the vocabulary of the sufferer and the scope of his imagination. It is almost invariably paroxysmal, and is described as boring, gnawing, tearing, lancinating, lightning-like, etc., varying in intensity and lasting from a second to several minutes, with intervals of comparative ease and comfort. I have seen strong men cry like a child and beg for someone to kill them, and end their agony, while suffering from neuralgia. While possibly not so constant, or probably overlooked, the objective symptoms have great diagnostic value. If we press down at the seat of pain, the patient complains of its being aggravated, and especially is this true when pressure is made at the point where the nerve emerges from its bony canal, or at any locality where the pressure is most efficient. Herpes is seen in that rare form of neuralgia called shingles, though the latter is by some classed among the skin diseases. Occasionally the muscles at the seat of pain are affected by clonic spasms, supposed to be reflexed from the peripheral sensory neurons, to the motor peripheral neurons.

In the treatment of neuralgia the earnest student and honest practitioner has a wide field. It is easy, indeed, after a hurried examination, to diagnose the case in hand as neuralgia, and prescribe one of the almost infinite variety of palliating remedies to relieve the pain. This is well enough, but it is quite another thing to reach the cause and direct the treatment for its removal. I find the cause in many instances quite obscure. It is difficult to say sometimes whether the affection is neuralgia *per se*, or a symptom of some other disease.

I wish to refer to a patient I had in Colusa county some five or six years ago. The lady was suffering with pain in the right maxillary region, and on examination I detected a decayed tooth on the right side. I referred her to a dentist. The dentist referred her back to me, saying that the tooth in question was not in any way responsible for the pain. This was during an epidemic of la grippe. As I had several patients with grip where the glands of the neck and jaw were involved, resulting in suppuration after five or six days of intense suffering, I thought this also might be that complication. I gave her some morphine to relieve her, poulticed, and awaited the suppuration. There was but little swelling, but the pain was excruciating; not paroxysmal, as in tic. Nothing except morphine gave her any relief. The jaw became almost set. This condition remained for about 10 or 15 days, when the pain became gradually less severe and in two or three weeks more left entirely. During this time the right side of the face became smaller and the right eye became about half its usual size, but proportional in its parts. The face presented a peculiar expression; each side seemed normal in its anatomy and function, except that the lower jaw was impaired in its action. This was the condition when I last saw her about two months after she was first seen. Was the case referred to neuralgia? If so, what was the cause? And what produced the atrophy, you might call it, of the affected side?

Even with our best efforts we are often subject to disappointment in the treatment of neuralgia. We sometimes flatter ourselves that we have found almost a specific, in certain forms of neuralgia, and begin to count our cures with full assurance of continued success, when all at once, in common parlance, "we are up against it". I had a few cases of obstinate sciatica that yielded so readily and nicely to deep injections of ether, that I began to flatter myself that I had the remedy. But I fell into the error of treating empirically, without discovering the etiology and directing my efforts to removing the cause. It is useless to say that the result was disappointing.

One of the most interesting cases of neuralgia I have chanced to meet was encountered here in this city. Some two or three months ago a man came into my office with a complaint that dated back some five or six years. At that time he was picking fruit and doing some heavy lifting. He noticed a disagreeable sensation in his right side that could hardly be called a pain, but gradually grew worse, though not severe enough to keep him from work. It finally assumed a certain stage, sometimes better sometimes worse, changing as the weather and his work varied. He was not confined to his bed at all. It was necessary for him to be quiet most of the time and he was not able to do heavy work. Sometimes the pain was tolerably severe. It seemed to originate in the right side and run down the anterior of the thigh to the foot. Again, at times, he would notice it only in his leg. His sleep was greatly disturbed, of course, and his health impaired; his system seemed to give way under the effects of his ailment. After eliciting the above history I made an examination. I found the ribs on the affected side very close to the brim of the pelvis and so close to each other that they seemed to ride one on the other. I told him I did not see that I could do him any good with medicine, and referred him to a masseur, with the hope that possibly a course of massage might help him by re-

storing the ribs to their proper position. He seemed to improve very much under this treatment, for the first week or so, but after a pretty fair trial of some two or three weeks he was as bad as ever. I called Dr. Perrin in consultation, and he, in the main, agreed with me in diagnosis. We advised an operation. I told him to study over the matter and that I could not promise him anything, even by this procedure. He finally concluded to take his chances in an operation. Dr. Whiffen agreed with me, that an operation might give him relief. He suggested that we remove part of the anterior portion of the tenth and eleventh ribs, and as a kind of guess, stretch the anterior crural nerve and some of its small branches. This was done on the 18th of July last. I am not able to report a complete recovery as yet, but my opinion is that the result of the operation is going to be satisfactory.

In closing this paper I wish to report a case that came under my observation before I became a student of medicine. The case referred to was one of traumatic sciatica in a friend of mine. In July in the eighties, when a student, he was taking exercise by jumping, after which he felt some uneasiness in his left hip, but paid very little attention to it, thinking it would soon pass away; but instead of getting better, it gradually grew worse. He spoke to his preceptor, with whom he was studying medicine, and the latter suggested that my friend use a cane, and gave him some liniment to apply. His condition grew worse, until it became necessary for him to use a crutch. He had planned to attend lectures that fall, and he went to St. Louis for that purpose, still using the crutch. He consulted several doctors in St. Louis, but none of them did him any good. He gave up his lectures the first of the year and came home. His preceptor put him on his back, with a long splint reaching up beyond the hip, and immobilizing the hip joint. He remained in that position for 60 days, and when he got up was entirely well.

This history is especially interesting to me, because of the diversity of opinion in the diagnosis among several of the most eminent surgeons who saw the patient at that time. Whatever may be the cause of neuralgia, whether traumatic or idiopathic, or whether neuralgia has a lesion itself or is only a symptom of another disturbance, our efforts should be to get at the bottom of the pathologic condition, and give permanent relief when possible, whether that be through medical or surgical means.

DISCUSSION.

In the discussion Dr. R. A. Whiffen referred to the subject as follows: Resection of a portion of the tenth and eleventh ribs for the patient referred to by Dr. Sanford, and upon whom I operated, gave absolute relief from the pain in the side, while the stretching of the anterior crural nerve gave relief from the pain the patient experienced in the leg, but left in its place a soreness which is no doubt due to the disturbance produced by stretching the nerve and it is a question with me whether it will finally give complete relief or not.

I wish to mention a treatment for tri-facial neuralgia recently tried by Dr. J. B. Murphy of Chicago, but which has been used by some English surgeon on a number of cases. It consists in dissecting out the supra-orbital, infra-orbital and mental nerves at the points where they emerge from their bony canals, and injecting into them a few drops of osmic acid. This gave relief to Dr. Murphy's patient, although the exact action of the acid in doing so is not definitely known. If this treatment should prove successful it will be a blessing to sufferers from tri-facial neuralgia

as it will save a great many of them from the ordeal of resection of the nerve inside the skull. I think it is worth consideration.

Dr. I. N. Frasse: It is of great importance, whether a pain be neuralgia or not, in concentrating our thoughts upon a cure, to not accept it as necessarily being, where at first glance it seems to be, but that we take into consideration that many pains have a distant origin. This is extremely common in neuralgias of a chronic variety. You all know that in tic douloureux the nerve pain is sent out to the nerve endings from a more central origin, and that only too often nothing short of removing the ganglion will give more than temporary relief. A sciatica is often but symptomatic and, owing to the intimate relation with the rectum, it may be due to the pressure of a scybalum in, or to a tumor of that portion of the intestine. This is particularly common on the left side. How often do you find nerve pain at the inside of the knee mistaken for a neuralgic pain when perhaps it is due to hip-joint disease? The ankle is abundantly supplied with nerve filaments, and through the medium of the long saphenous, and of the other five nerves supplying this region, pain is sometimes transferred from tumors and other diseases of the spine in the neighborhood of the lumbar and sacral regions.

Sometimes a nerve pain of a neuralgic type is due to an inflammatory disorder, but is transferred like any other nerve pain. The sympathetic supplying the abdominal contents receives filaments from the spinal nerves, which in turn supply the abdominal walls, and I may recall to your minds that the oncoming pain of recurrent appendicitis is often felt at first in the region of the umbilicus before it is manifested in the locality of the appendix itself. And so one might mention examples without end wherein the physician must be on his guard.

Dr. J. E. Truman: In reference to neuralgia, my experience leads me to believe that it is always, when not toxic, due to the products of malassimilation, infectious disease or allied causes; a reflex phenomenon. A lesion or source of irritation more or less remote from the seat of pain may always be looked upon as the source of the trouble. We are all familiar with the left breast pain, headache and, in fact, pains in any part of the body from the cicatricial plug of a lacerated cervix; the various neuralgias from carious teeth, and many other reflexes. I believe that when we have pain in the nerve locally, it is always of the character of neuritis. As to treatment, my experience favors massive doses of sodium salicylate. Although this empirical, it can be relied upon.

Dr. G. F. Witter: I shall not attempt to add anything to what has already been so ably offered at this time, farther than to ask that the closing reference to the importance of learning the exact changes which are sure to command our attention and anxiety in some of the developed reflexes which so often confront us in this class of the nerve group of diseases. I can do no better in this connection than to refer to a case that came under my observation some time since, after the patient had returned from the medical care and supervision of a prominent expert in nervous diseases, who was a resident of Chicago. The able expert pronounced the disease absolutely dangerous and incurable, and his sincerity was the more manifest when he advised the patient to return home and close up his business without delay. A careful examination into the case of the almost unendurable pain in the left eye and left orbital nerve revealed the fact that the pain had its origin in the lower branch of the auriculo temporal nerve, and that the pain radiated in the region of the ear along the lower left jaw and teeth, which was evinced most clearly by finding a tender and painful point along the jaw

by striking the teeth along the left submaxillary with a tooth forceps, until I reached the wisdom tooth, which was found almost alarmingly tender and painful. This tooth was extracted, and the pain, which had been so alarming, soon subsided and the eyes resumed their normal action and appearance. This case speaks volumes in favor of the theory advocated by Dr. Sanford, as well as the line of argument of Dr. Asey and other able supporters of the reflex theory.

ASEPSIS; ESPECIALLY IN THE PRACTICE OF OBSTETRICS*

By J. W. GRAHAM, M. D., Lompoc.

IN undertaking to write upon "Asepsis," the first difficulty encountered was to define the limits of the subject; once decided upon, the next question that presented itself was how best to make use of the time allotted for its discussion. It is impossible in this paper to go with any fullness into the details of the experimental research by which the truth of the germ theory was proved. Adopting the germ theory of putrefaction and fermentation, the great importance of cleanliness and of antiseptics is made plain, means which will exclude the access of germs. The question now is: What is necessary to be done to prevent sepsis occurring in the obstetrical chamber?

The following from the pen of a noted writer, an obstetrician of wide experience, seems to me to be up-to-date advice, and about what we hear and read from every source. Asepsis, as advised by him, is not necessary in a country practice, if it were attainable, which cannot be the case once in a thousand times:

When a patient is taken in labor, she is given a full tepid bath and scrubbed with soap, and to make the bath still more effective, it might be well to add soda to the soap and water; after the bath she is dressed in clean clothes and placed in a clean bed; under the sheet of which is placed a rubber sheet disinfected with bichloride, 1-1000. She is given an enema of soap suds; her abdomen, thighs, buttocks, and especially all the sulci at and near the genitals, are carefully washed with bichloride, 1-2000; after this about two quarts of the same fluid is injected into the vagina.

Now if the woman is still alive and in as good health, and as free from bacterial infection as she was when the ordeal began, and has not already been confined, she surely will be by the time the doctor is in good antiseptic trim to see her.

He ought to take off his coat and cuffs, roll up the sleeves of his shirt and undershirt, and clean and disinfect his hands, chemically and mechanically. It is not enough to use soap and rub our hands one against the other, as in ordinary cosmetic washing. The whole hand must be carefully scrubbed with a stiff nail brush, the doctor taking particular care to scrub the spaces under the nails and the creases at their root. After washing the hands are wiped dry and the spaces under the nails carefully scraped with a suitable instrument. This performed, the hands are emersed in a bichloride solution, 1-200, for at least three minutes, in which the scrubbing may be repeated.

It appears that the washing and scrubbing out with soap and disinfecting and antiseptic procedure with the bichlorid solution must be in separate acts, that it is not sufficient or desirable to use the soap in the bichlorid solution; I would suggest the reason for this that in using both at the same time the bichlorid might interfere with the antiseptic properties always contained in soap. The soap used is the soft potassa variety, and in a sensible conclusion he adds, in evidence of the true merit of soap as an antiseptic:

We cannot have a better proof of the high practical value of this soap as an antiseptic than the excellent results obtained in the large lying-in hospital of Vienna, where they have had a series of five hundred confinements, without a death from sepsis," for, says he, "since the standard antiseptic used in that institution is only a $\frac{1}{2}$ solution of carbolic acid, which has been proved experimentally to possess very weak antiseptic properties, it would seem that the results obtained are due more to the soap than to the carbolic acid.

In my paper today it is my purpose to show that asepsis, in the sense in which it has come to be accepted, is unattainable and not necessary for the obstetrician in a country practice. Owing to the fact that progressive country doctors are largely dependent for their knowledge of bacteriology and other kindred sciences upon books and magazine articles written by the city men for city men, we have unconsciously accepted metropolitan standards of asepsis which, although well enough perhaps as ideals, are nevertheless unattainable (and unnecessary) in our surroundings and the conditions we have to meet in a country practice.

In support of this statement I would call the attention of my colleagues to a few facts with which, although I am sure you are all quite familiar, perhaps have not been placed before you in such a way as to lead to reflection upon their true merit and their value, to the majority of the medical profession. We, the country physicians, are they who meet and overcome the real trials and difficulties of medical practice.

First. I wish to ask of you: How many ever considered the importance of one fact, well known to all of us, that although we do operation after operation with, from the accepted point of view, very imperfect or no attention to strict asepsis, our results do not show a greater proportion of septic infection than do those of city doctors, who operate in hospitals where asepsis and antiseptics are carried to an extent which would be neither desirable nor attainable with us in our surroundings? This is due to several facts, and it shall be my endeavor, in this paper, to place them before you in their true significance. We have the records of very exhaustive bacteriological experiments carried on at great cost and labor, the practical results of which have been entirely ignored or at least never applied to any material

*Read before the Santa Barbara County Medical Society.

(Continued on Page 173.)

MEDICAL SOCIETY MEETINGS.

Alameda County.

The meeting of the Alameda County Medical Society for March was the occasion of the annual banquet, and no business was transacted, nor papers read, the evening being spent in social intercourse.

Correction—In the report of the February meeting of the Alameda County Society, the history of a remarkable case of hydatid cyst was printed as reported by Dr. J. F. Rinehart, whereas the author's name should have been printed Dr. George F. Rinehardt.

Humboldt County.

The annual meeting of Humboldt County Medical Society was held Tuesday evening, March 8, at Eureka, and the following officers were elected for 1904: President, G. W. McKinnon, Arcata; vice-president, O. W. Sinclair, Eureka; secretary, G. N. Drysdale, Eureka; treasurer, C. O. Falk, Eureka; delegate to State Society, W. H. Wallace, Eureka; alternate, R. E. McKibbin, Loleta.

The following were appointed on committees for the year:

Program and Scientific Work, Drysdale, Rae, Felt, and C. W. Mills; Public Health and Legislation, Chas. Falk, E. J. Hill, and A. V. Miller; Social Entertainment, H. G. Gross, Louis Dorais, and T. L. Loofbourrow.

Dr. B. Y. Harris of Eureka was elected to membership.
G. N. DRYSDALE, Secretary.

Los Angeles County.

The Los Angeles County Medical Association held a regular meeting at Blanchard Hall on Friday evening, February 19, 1904.

The first paper of the evening was read by Dr. W. M. Lewis on "Intestinal Obstruction from Peritonitis due to Traumatism, with Report of a Case." He reported a case of a farmer, 45 years of age, who had complete obstruction of the bowels from the kick of a horse, operated upon twice, with severe fecal-fistula following, and recovered. In this case he called attention to the following points:

1st. Perforation of the intestine from severe contusion without a single sign of an injury to the abdominal wall; 2nd, The resistance of the peritoneum to infection in some cases; 3rd, Closure of fecal-fistula under absolute rest; 4th, Closure of abdominal wound by use of adhesive straps only; 5th, Treatment; Following a method used by Ochsner.

Dr. Andrew Stewart Lobingier then read the second paper on "The Early Recognition and Treatment of Intestinal Obstruction." He gave the cardinal symptoms as obstipation, pain, vomiting, meteorism, and collapse. All of these symptoms may not be present in a single case, but sufficient of them to leave the surgeon anxious to bring to bear some definite measure which shall determine the true condition present. More cases of intestinal obstruction have been recorded as following vaginal hysterectomy, than any other intra-abdominal operation. The treatment of intestinal obstruction is immediately and at all times surgical. Early diagnosis and early operation should be our doctrine in every instance where briefly and skillfully applied therapeutic measures have failed to relieve the patient.

A regular meeting of the Los Angeles County Medical Association was held in the Blanchard Building on Friday evening, March 4, 1904.

The first regular paper of the evening was read

by Dr. F. M. Pottenger on "Specific Medication in Pulmonary Tuberculosis." He said in part, the theme of every paper dealing with the treatment of tuberculosis should be that tuberculosis is a curable disease; the most curable of all chronic maladies. The claims of tuberculin and its allies to be considered as specifics is based upon its peculiar selective action which they have upon tubercular tissues, when injected into organisms affected with the disease. In 1100 cases of incipient pulmonary tuberculosis tabulated by the writer, 20% more patients were cured by the use of culture products than those treated by ordinary means. These remedies are only of value in tuberculosis, they must not be expected to combat a mixed infection or a case of pneumonia, nor must they be expected to replace the dead and dying tissue, which has resulted from the complications of the advanced stages of this disease. Specific remedies, no matter in what disease used, should be reinforced by every other measure of recognized worth. That tuberculin and its allies in early and non-febrile cases, and streptolytic serum in mixed infection, we have the remedies, which, when added to the ordinary common-sense measures, remove much of the cloud hanging over this misunderstood and neglected disease, and prove it to be amenable to treatment and capable of cure in a large percentage of cases.

Dr. C. W. Seeber read the second paper on "The Treatment of Pneumonia." Among other things he said, of all things most necessary an abundance of fresh air is the desideratum in this disease. The patient's position should be frequently changed. The carbonate of creosote has acted as near a specific as any drug in any other disease with which I am familiar. I begin with 15 minims, repeat it every two hours until two drachms are taken and then at three hour intervals until the temperature falls to 102 degrees, after which time I give about a drachm in the 24 hours until the patient is comparatively well. He also uses strychnia in sufficient doses to improve the heart's action, and relies chiefly upon coffee as a stimulant. He said, "I rarely give cough preparations of any kind, and as to external applications, I seldom use them." JOS. M. KING, Secretary.

Marin County.

The regular monthly meeting of the Marin County Medical Society was held at Dr. Jones' office, San Rafael, on February 6th.

A paper was presented by Dr. H. O. Howitt entitled, "The Diagnosis of the Eruptive Fevers." The paper was discussed by Drs. Jones, Crumpton, Wickman, Kuser, and Mays, stress being particularly laid on the necessity of better quarantine than is usually observed, and of educating the public up to a proper appreciation of the necessity of it.

A. H. MAYS, Asst. Secretary.

Merced County.

The regular meeting of the Merced County Medical Society was held March 3rd, in the office of Dr. DeLoss.

On motion of Dr. Rucker, Dr. J. H. Wolfson was elected to membership. The paper for the evening was prepared and read by Dr. H. DeLoss, the subject being "Puerperal Eclampsia."

The paper was concise and practically dealing with the symptoms and treatment of this serious condition, largely from personal experience. The subject was thoroughly discussed, the meeting being a very profitable one to all those present.

W. E. LILLEY, Secretary.

Monterey County.

The County Medical Society met in regular session for the month of March at the Carmelo Hotel, Pacific Grove. The president, Dr. Edwards, in the chair, and a good attendance of members participated in the meeting. Dr. Molgaard read a paper on "Paracentesis of the Tympanum, Its Necessity and Its Technic." The paper was discussed at some length by the members present. A report of the committee on fee bill was called for, and the chairman of the committee, Dr. Ritchie, reported that the committee had done considerable work, but was not yet prepared to make any recommendations. The general discussion of the question which followed brought up a number of points of great interest closely related to the general question of organization and the influence of the County and the State societies. Dr. Philip Mills Jones, of San Francisco, the organizer for the Board of Trustees, had been invited by the Society to attend the meeting and to discuss with the members these questions of organization. He called attention to the fact that no fee bill or schedule of fees, or agreements of any sort would be of any practical worth unless such undertakings were backed up by every physician in the county represented in its county medical society. If all the practitioners in the county would join together to form a solid medical society (practically all are now members of the society) then they could do very much. The principal thing is to get together and agree upon some common basis, and then all hold together and support it. It was agreed by all present that lodge practice in Monterey county should cease, and all the members of the society concur in their refusal to undertake any of this class of work. The matter of railway work was discussed, and all agreed to abide by whatever determination was reached, eventually, by the society. The meeting was an unusually good one and the interest of the county physicians is a clear indication of what a little effort will do in bringing about good feeling and solid organization. The power which the county society, as a part of the State Society, can exercise was well illustrated in the case of Dr. Teaby, mentioned elsewhere in the JOURNAL. The society determined to meet next month at the Monterey Hotel, Monterey, and to extend the time during which charter members may join the society until the 15th of April. The society then adjourned to the dining-room of the hotel and discussed an excellent supper provided by the physicians of Pacific Grove.

Napa County.

The Napa County Medical Society met in Napa, March 1st.

Dr. D. E. Osborne was elected delegate and Dr. E. E. Stone alternate to the coming meeting of the State Society.

No papers were read before the society, Dr. Blodgett, who was to have read one, being unable to be present.

On adjournment it was decided to meet in Napa on June 14th with the Northern District Medical Society.

J. L. ARBOGAST, Secretary.

Orange County.

The Orange County Medical Society met in regular session in Santa Ana, Tuesday, March 1st.

Dr. F. E. Wilson of Westminster read the paper of the evening, his subject being "Tonsillitis." The paper was the cause of quite an animated discussion, the principal feature of the discussion being the relationship existing between tonsillitis and rheumatism, which, I am sorry to say, was not definitely settled.

H. S. GORDON, Secretary.

Sacramento County.

On February 16, 1904, the Sacramento Society for Medical Improvement met in regular session at the residence of Dr. D. L. McLean. The president, Dr. Ross, called the meeting to order and the following members answered to roll call: Drs. W. E. Briggs, Cartwright, Hanna, Hatch, Henderson, James, Krull, McGavren, McKee, McLean, Hesser, Foster, Ross, G. C. Simmons, G. L. Simmons, Strader, Stevenson, Twitchell, J. L. White, Wiard, and Wright. Dr. Harcourt, formerly a member of the Society, now a resident of Roseville, was a guest of the Society.

After the usual preliminary business the paper of the evening was read by Dr. D. L. McLean on "Gastric Ulcer." The discussion was opened by Dr. Twitchell and partaken in by many of the members present.

The meeting then adjourned.

J. W. JAMES, Secretary.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held March 8th, 1904, the president, Dr. Rosenstirn, in the chair.

The subject of the scientific program of the evening, was Tumors of the Brain, Dr. Leo Newmark treating of their diagnosis, and Dr. Fred Fehleisen of the modern technic of exposing and removing them. Both papers were most favorably received and extensively discussed; an abstract of the discussions is here presented:

Dr. Cooper—I think that if one wishes to get the utmost benefit from these cases one has to do as Dr. Newmark has done, follow them through their clinical history, to the operating room and further, to the post mortem. The better the neurologist and surgeon, the better it is for the patient. One is likely to confuse hysterical affections of the nervous system with brain tumors. A patient with all the stigmata of hysteria may have a brain tumor; a combination of these symptoms may exist. It is in this combination one gets benefit from examination of the fundus of the eye. In repeated examination, rather than in solitary examination, we will derive our explanation of these symptoms. Harvey Cushing, in Kocker's clinic, has shown that the blood pressure in such cases depends upon the intracranial pressure; if we have high pressure we should expect a high blood pressure, and when the vaso motor pressure does not overcome the high intracranial pressure, symptoms of paralysis supervene. If Harvey Cushing is right, we can be aided in making a diagnosis, from his methods; as the intracranial pressure varies, so must the blood pressure vary.

Dr. Brown—I noticed in watching Dr. Keen operate that he worked very rapidly with the chisel. He had no hesitancy in opening an immense area of the skull. In less than 15 minutes he had laid bare a part of the skull that was nearly equivalent to the size of my hand. The osteoplastic flap exposing the entire region is much better than a small opening. I have seen a case of this sort, where the surgeon trephined the skull, the tumor exactly fitted the opening that he made, and was not recognized. He closed the skull and the patient died. If he had made a flap he could not have failed to notice and remove the tumor. I removed, at autopsy, a tumor, where an accurate diagnosis as to localization had been made; where an immense tumor had been accurately located. The trephine had been used immediately over it, but the surgeon failed to recognize the position of the tumor through the small opening, and this had prevented its successful removal.

Dr. Stillman—If there is any field of medicine which should be a specialty, I think this is it. Those men

who are doing the most intelligent work ought to be encouraged and furnished with the greatest amount of material. Dr. Cooper's remarks about the brain pressure I think furnish the probable explanation of the great mortality which accompanies exploratory operations. On that account, as well as for other reasons, I object to osteoplastic flaps. As Dr. Fehleisen said, if you have to make it bigger afterwards the value is lost. If we cannot remove the tumor the least we can do is to relieve intracranial pressure. It must be kept in mind that cystic tumors are not infrequent in comparison with tumors of the brain in general and mere evacuation does not always give assurance of permanent recovery. I do not think that the present results in this field are anything like what they will be in time. The surgical part is the least part of these cases. The diagnosis is the most important. It requires close reasoning and the minutest observation.

Dr. Sherman—I wish to speak only of one or two points because of my lack of experience in these cases. I have only opened two skulls for tumors and one skull happened to be opened twice. As regards the method of opening, I agree with Dr. Stillman; the real work in these cases is done by the neurologist. I have always used the osteoplastic method. That permits you to restore the skull if you succeed in getting out your tumor. I have done that practically always with the chisel. I have never used the dental engine. I have been informed that the dental engines cause excessive hemorrhage. Fraser, in a recent article, speaks of hemorrhage which comes from use of the engine. The chisel is absolutely harmless. The hemorrhage which occurs during the incision, whether with burr, or rongeur or with the chisel, is due to intracranial pressure. In this same paper of Fraser's he states that he has in certain instances stopped his operation and completed it later, because of the fall of blood pressure and the patient being in shock. He quotes Kriel, who has stated the ease with which the circulation in the tumor and skull can be controlled by temporary ligation of the carotid arteries. Fraser says it is a dangerous proceeding. The blood pressure in different individuals varies within wide limits.

Dr. Pischel—Regarding the frequency of neuritis in tumors of the brain I wish to refer to a paper which I read a few years ago. I found in 908 cases of brain tumor that over 81% showed disc atrophy of the optic nerve. The immediate cause of the formation of the choked disc is still discussed.

Colonel A. C. Girard of the Army, being called upon, stated that he was pleased to announce that he was to be stationed in San Francisco and would be able to attend the meetings more regularly.

San Joaquin Valley.

The 17th regular semi-annual meeting of the San Joaquin Valley Medical Society was held at Tulare on Tuesday, March 8. The papers presented were as follows:

"The Treatment of Strychnine Poisoning," by Dr. J. B. Rosson, Tulare; discussion opened by Dr. W. E. Lilley, Merced; "The Causative Relation of the Mosquito to Malaria," by Dr. W. H. Miller, Hanford; discussion opened by Dr. H. W. Taggart, Stockton; "Cyclic Vomiting," by Dr. A. B. Cowan, Fresno; discussion opened by Dr. T. O. McSwain, Visalia; "Defects of Hearing in the Young and Old," by Dr. D. H. Trowbridge, Fresno; discussion opened by Dr. W. S. Fowler, Bakersfield; "Puerperal Septicemia and Its Treatment," by Dr. R. E. Bering, Tulare; discussion opened by Dr. W. T. Barr, Fresno.

The physicians of Tulare tendered a banquet in the evening to the members and guests at Odd Fellows' Hall.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular monthly meeting in the parlor of the Arlington Hotel, Wednesday, March 9th, 1904. The meeting was called to order at 8 P. M. by the president, Dr. Charles Anderson. The following members were present: Drs. Charles Anderson, W. F. Blake, W. T. Barry, W. B. Cunnane, W. H. Flint, S. Newman, H. Sidebotham, C. S. Stoddard, C. E. Vaughan, A. W. Taylor and R. F. Winchester. Visitors: Dr. J. B. Murphy, Chicago; Dr. E. J. Spaulding, Cottage Hospital; Miss McGregor and Miss Pettinger, nurses.

Dr. Stoddard reported a very interesting case, "Intubation for Membranous Croup, Followed by Death from Pneumonia." A second case occurred in the same family, but the symptoms disappeared after administration of nine thousand units of Antitoxin within twenty-four hours.

The paper of the evening, "Twenty Years' Recollections of Antiseptic and Aseptic Surgery, 1884 to 1904," was read by Dr. Barry, and was followed by a spirited discussion in which all the members present took part.

At the request of the president, Dr. J. B. Murphy entertained the Society with a very interesting account of his experience in antiseptic and aseptic surgery, from the time he began practice up to the present.

He said antiseptics was of chief importance in emergency, and asepsis in elective surgery; instead of wearing gloves while operating, it was his custom, after carefully washing the hands with soap and water, to bathe them in a solution of four per cent., by weight, of gutta-percha in benzine, which leaves a thin film impervious to fluids, for about three hours. He believes that infection is always by contact, and cited numerous cases as evidence of that fact; hence, it follows that neither fingers nor instruments should be introduced into the wound of a compound fracture. Judging by his experience, he believes all cases of peritonitis, except the streptococcus variety, should recover if properly treated. In a peritonitis due to perforation in typhoid fever, appendicitis, or perforation from any other cause, all that is necessary is a simple laparotomy to relieve pressure, and then drainage; mopping, washing, sponging or handling the intestines or peritoneum in any manner whatsoever he considers a fatal mistake. After the operation, he places the patient in a half sitting position, that is an angle of thirty-five to forty-five degrees, avoids medicine, especially opiates, and administers an enema of 1½ to 2 pints of normal salt solution every 2 hours. He reports fourteen consecutive recoveries treated in this manner.

On motion, the Society thanked Dr. Barry for his able paper, and Dr. Murphy for his interesting remarks.

Dr. H. P. Morrey was elected to membership in the Society. Dr. C. E. Vaughan was requested by the president to draft appropriate resolutions respecting the death of Dr. R. Mackinley, with instructions to report at next regular meeting.

The following resolutions were adopted:

WHEREAS, There is now pending before Congress a bill known and designated as, "A bill to Increase the Efficiency of the Medical Department of the United States Army," and

Whereas, This bill, as a whole, is of great merit and is needed, to do justice to the officers of the Medical Department of the Army, therefore, be it

Resolved, That we request our Senators and our Representative in Congress to vote and work for the pas-

age of the said bill, with the exception of the last five lines of Section 9, of said bill, and that we request our Senators and Representative in Congress to use all their influence to have the said last five lines of Section 9 omitted and an amendment inserted that all officers of the Medical Reserve Corps of the Army who may, or shall, be permanently disabled either by sickness or wounds while on duty in active service in the United States Army shall be placed on the retired list of the Army as other officers of the Army, with the same pay and allowance as other officers of like rank and grade.

Resolved, That a copy of these resolutions be furnished our Senators and Representative and their cooperation asked.

Resolved, That other medical societies be asked to cooperate in this matter.

The last five lines of Section 9, referred to, read as follows: "Provided, That no officer of the Medical Reserve Corps shall be entitled to retirement or re-employment pay; nor shall he be entitled to pension except for physical disability incurred while in active duty and in line of duty."

This bill as it stands now proposes to cut off officers of the Medical Reserve Corps who are to have the same duties, responsibilities and dangers incident to the service with less than a common soldier. As these men work alongside the officers of the Medical Department and do the same duties, and have the same responsibilities and are just as liable to be invalided by the same diseases and accidents, it is only just that they should have the privilege of retirement for permanent disabilities incurred while on active duty that are incident to the service and incurred in the line of duty.

W. B. CUNNANE, Secretary.

AMERICAN LARYNGOLOGICAL, RHINOLOGICAL AND OTOLOGICAL SOCIETY.

Annual Meeting of the Western Section.

The annual meeting of the Western Section of the A. L. R. & O. Society was held in San Francisco on Friday evening, February 26th, and Saturday afternoon, the 27th, in the rooms of the San Francisco County Medical Society, Y. M. C. A. Building. Both meetings were very well attended, and the sessions were the most successful the Section has ever held.

A program consisting of 21 numbers was contributed to by noted specialists, both of this Coast and from several Eastern cities.

Dr. Redmond Payne, chairman of the Western Section, in opening the proceedings, introduced Dr. M. W. Fredrick, president of the local Society of Eye, Ear, Nose and Throat Surgeons, who extended on behalf of that society a hearty welcome to San Francisco. Dr. Payne then said:

You have heard the warm words of welcome by my esteemed colleague, Dr. Fredrick. I simply wish to add my hearty confirmation of them and that we wish to make you most welcome; we wish to express our hearty appreciation of the presence of those who have come long distances to take part in this meeting. West of Chicago there are not more than 25 or 30 members in this Society. They occupy the territory of an empire, so that to come to San Francisco from Washington State is almost like going across the continent, and even the distance from Southern California to San Francisco is much greater than from almost any point in the East to the meeting place of any one of the Eastern sections. The number of those who are taking part in this program from various parts of the West shows their good intentions and their effort to take an active part in the scientific work of this Society. Many of them, however, have been prevented from reaching here for various reasons, causes we are all familiar with, that happen to the physician when he tries to get away from home. We are deeply appreciative of the effort of these fellows, even though they have not found it possible to be present. It only brings out more strongly, however, the greater appreciation we should feel for those who have

succeeded in being present from those widely separated sections, and who will take an active part in carrying out the purposes of the meeting. We have a number of very interesting papers which will be presented this evening, the reading and discussion of which I know will be to our benefit and advancement, and though our numbers are small, good work can nevertheless be accomplished. There must be beginnings in meetings of this character upon this Western slope. I regard this as a beginning. I only hope that it may prove sufficiently encouraging to enable the chairman of our next Western Section to greatly improve upon it and thus attract many of our Eastern confreres.

Space will not permit more than mere mention of the papers, but in future issues of the STATE JOURNAL it is hoped to print some of these in full.

Dr. Wallace I. Terry, San Francisco, read a paper on "Malignant Diseases of the Larynx; Laryngotomy; Artificial Larynx; Demonstration." Discussion by Drs. Arnold, Wagner and Stillson.

Dr. Benj. F. Church, Los Angeles, a paper on "Radical Operative Treatment of Chronic Suppurative Otitis Media." Discussion by Drs. Martin, Pischel, McCoy, Stillson, Powell, Briggs, and Arnold.

Dr. Redmond Payne, San Francisco, "Demonstration of Cases Operated Upon for Empyema of the Frontal Sinus, Maxillary Sinus, Ethmoid Cells and the Sphenoidal Sinus." Discussion by Drs. Fredrick, Cohn, Wagner, McCoy, Pischel, and Arnold.

Dr. Philip King Brown, San Francisco, "The Relation of Heart Disease in Children to Various Throat Affections." Discussion opened by Dr. M. W. Fredrick.

Dr. Henry L. Wagner, San Francisco, "The Cure of the Throat in Children." Discussion opened by Dr. W. E. Briggs.

Dr. W. Freeman Southard, San Francisco, "Cerebral Abscess with Perforation of Skull at Vertex; Extension from Suppurative Otitis Media; Operation; Recovery; Demonstration of Case." Discussion by Drs. Stillson and Powell.

Dr. J. Dennis Arnold, San Francisco, "The Throat Affections in Glanders in the Human Subject."

Dr. W. Scott Franklin, San Francisco, "Congenital Bone Atresia of the Nose; Report of a Case." Discussion by Dr. Fredrick.

Dr. Hamilton Stillson, Seattle, "Ocular and Cerebral Affections from Nasal Diseases." Discussion opened by Dr. Barton Powell, Stockton.

Dr. J. M. Flint, San Francisco. Demonstration of casts of the frontal sinus and of the antrum of Highmore.

A number of other papers were read by title.

"Unscientific and Careless Prescribing of Secret and Proprietary Remedies" is the title of a very fine paper by Dr. Harry R. Purdy, in the *New York State Journal of Medicine*, March, 1903: "Prescribing of tablets by the numbers used by manufacturers in their price-lists to designate the various combinations is on a par with the dosing carried out on certain vessels of the merchant marine, which carry a medicine chest, but have no doctor on board. The bottles of medicine in the chest are duly numbered and with them is a book describing the symptoms which require a dose of such-and-such a numbered mixture. Many of you may remember the old story of the ship's mate who went to the captain stating that a sailor had symptoms which, according to the book, required a dose of No. 9 mixture, but that No. 9 bottle was empty. 'That does not matter,' said the captain, who, in the emergency, rose almost to the level of certain modern prescribers, 'give him equal parts of No. 4 and No. 5.'"

PUBLICATIONS.

Diseases of the Nervous System; a Text-book for Students and Practitioners of Medicine. By H. Oppenheim, M. D., professor at the University of Berlin. Translated and edited by Edward E. Mayer, M. D., Pittsburg, Pa., with 343 illustrations. Price, cloth, \$5.00 net, Philadelphia: J. B. Lippincott Co.

Oppenheim's *Diseases of the Nervous System* is so well and so creditably known to all students of neurology that this review will only serve to acquaint them with the fact that a second American edition has lately been issued. The book, as stated in the preface, is not only a judicious review of neurology, but contains much original information that Professor Oppenheim has published nowhere else. It has only to be thoroughly read to gain warm appreciation, and when once read will frequently be referred to, and rarely in vain, for information on any doubtful neurological point. We believe the value of the book would have been enhanced if the references gave the journal in which the authors published their quoted work. Moreover, the English text shows evidence of an hastiness in translation which sometimes mars the lucidity of the work, e. g. under the heading, *Scleroderma*, we find "the prognosis is an earnest one" instead of "a serious one," and many of the sentences are labored and involved. With these exceptions we have nothing but praise for the work. The method of electrical examination of muscle and nerve, that bugbear to many students, is made clear and lucid. The illustrations, though comparatively few, are accurate and convincing. In the chapter on tumors of the brain the fatal results which have occasionally followed lumbar puncture are referred to, but the terms optic neuritis and choked disc are used indiscriminately, to which we believe our friends the oculists object. The chapters devoted to a consideration of "The Neuroses" are extremely interesting and instructive and there are a few pages devoted to a description of "the Psychopathic Diathesis" under the headings "Conditions of Fear," "Imperative Ideas," etc., which are really helpful. In conclusion we would add that in our opinion this text-book is absolutely necessary to those doing neurological work, for whilst lacking to some extent the readability of Starr's manual and the mental stimulating suggestiveness of Gowers' volumes, in time of need it is more likely to aid us than either.

CHARLES MINOR COOPER.

International Clinics, Volume IV of the thirteenth series, by J. B. Lippincott Company, is now out. This volume is quite up to the standard of previous volumes, both in the matter of writers and papers. John H. Musser writes on the "Treatment of Pneumococcal Infection of the Lung"; Louis Julien discusses the "Subcutaneous Injections of Mercury for Syphilis"; Andrew Duncan writes of "Tropical Dysentery." "The Radical Cure of Prostatic Hypertrophy" is the topic of J. Albaran, and there are numerous other articles of value.

A First Book in Organic Evolution. By D. Kerfoot Shute. Open Court Publishing Co. "This little book has been written chiefly for the use of students in the Medical Department of the Columbian University. It is designed to serve only as an introduction to the study and development theory, and the subject has been presented, it is hoped, in a manner that will render it interesting and easily intelligible to the general reader." The book is divided into seven parts or sections: Organic cells—the visible units of life; Heredity with variation; Unstable environment; Transmutation of living forms; Natural selection; Evolution of man; Classification of animals and plants. Illustrations, many of them splendidly col-

ored, are sufficiently plentiful to accentuate the points made by the author, and are so well done that they add greatly to the value as well as the appearance of the book. "On the theory that men in bygone ages were closely allied to simian creatures in habit as well as in structure; that they led an arboreal life; and that, like the baby-monkeys today, the baby-men of other ages clung to their mothers as they climbed among the trees, Dr. Louis Robinson predicted that a baby's power for grasping would likely be found to equal that of a young monkey which had reached a corresponding period of growth." Dr. Robinson made experiments upon some sixty babies from one hour to four days after birth, and found that in every case this grasping power was



shown to exist. The babies could hang on for from ten seconds to a minute. The illustration (here reproduced through the courtesy of the Open Court Co.) shows one of Dr. Robinson's experiments. The whole posture of these babies is strikingly simian.

Illustrated Dictionary of Medicine, Biology and Allied Sciences, by George M. Gould, A. M., M. D. A reliable medical dictionary is as essential to the studious physician as a good English dictionary is to the student of general literature. Dr. Gould's fills the requirement as to reliability, and in addition to that is wide in its scope. Not only are the pronunciation, accentuation, derivation and definition given of terms used in medicine, but there are included those used in the various sciences closely allied to medicine. The fifth edition of this important and valuable work has been issued, with corrections and additions of words which have come into use during the period between 1895, when the fourth edition was issued, and the present. The work is liberally illustrated and contains many tables of exceeding value for reference. As an indication of the great popularity of Gould's dictionaries, the publishers announce that 145,000 copies have been sold. Price in full sheep, with thumb index, \$11; also students' edition, \$2.50; pocket lexicon, \$1.00. Philadelphia: P. Blakiston's Son & Co.

The Principles of Bacteriology. By Ferdinand Hueppe; Authorized translation by E. O. Jordan. Open Court Publishing Co. In 1895 the author wrote in the preface to this work, the following: "Bacteriology is just now in transition from the natural history stage to the scientific. The former aspect is adequately treated in some good and comprehensive manuals which attempt to bring together all the available data, and there exist also some good short text-books which contain, in addition to an exposition of methods, the more important facts of the subject set forth with especial view to the needs of the physician. * * * In this book I wish to present an attempt at a critical and comprehensive exposition of bacteriology, basing it clearly and solidly upon scientific conceptions." The author seems to have aided materially in hastening the transition stage, and in moving bacteriology into the domain of science. The book is well gotten out and illustrated.

The Self Cure of Consumption Without Medicine, by Chas. H. Stanley Davis, comes from the press of E. B. Treat & Co., and sells for the modest sum of 50 cents. This little volume is an excellent one to place in the hands of the tubercular patient who has enough intelligence to carefully consider his own case, his own chances of recovery, and the proper things he had best do to take care of himself. It is written in a quiet, dignified manner and ought to meet with a friendly and cordial reception from the medical profession. The work of the out-door sanatoria in the East is discussed in a dispassionate tone, but one that is very convincing. The book ought not only to sell well, but it ought also to do considerable good when placed in the right hands.

The American Journal of Obstetrics for March contains two interesting papers on the subject of extra-uterine pregnancy. One is by F. F. Simpson, recounting a case of combined intra- and extra-uterine pregnancy, and the other is by Henry D. Ingraham, reporting twelve cases of extra-uterine gestation. Accompanying the article by Simpson is a table which seems to have been compiled with great care and includes all the reported occurrences of this very unusual complication, 113 in all.

The Blues (Splanchnic Neurasthenia) Causes and Cure, by Albert Abrams. E. B. Treat & Co., New York, \$1.50. With a frontispiece showing the author's profile. It is difficult to determine, from the preface, whether this book is intended for the professional man or the lay reader and prospective patient. As the book seems to be extensively advertised and written up in lay publications, however, it is probably intended for the latter class.

The Complete Medical Pocket-Formulary and Physicians' Vademecum, third edition, is issued by the J. B. Lippincott Co., price \$1.75. This oblong volume contains 2595 prescriptions and several blank pages for additions, as well as other matter of more or less constant value. The arrangement, alphabetically by diseases, or diseases alphabetically, is a good one and reference is easy.

Transactions of the Medical Society of the State of New Jersey, 1903. Some of the papers contained in this volume are the following: Cantwell's Operation for Complete Epispadia; Infantile Colic; Mosquitoes and Malaria, by J. J. Kinyoun; Malformations of the Female Generative Organs; Extensive Fracture of Skull; Excision of the Scapula; Vaccination.

(Why not publish a journal?—Ed.)
Some Ancient Pharmacists. By Prof. C. S. N. Hallberg. Reprinted from the *Western Druggist*. This is an exceedingly interesting pamphlet on the early history of pharmacy, which, at that time,

meant medicine, for the practice of pharmacy was the forerunner of medicine and of the natural sciences.

Three cases of appendicitis in which the patient was operated upon during pregnancy, are reported by Monod (*Compt. Rend. de la Soc. d'Obst., T. V. 1903*). The operation did not disturb the course of the pregnancy, nor did the latter seem to affect the operation at all.

Experiments on the Metabolism of Matter and Energy in the Human Body, by W. O. Atwater and F. G. Benedict, is an exceedingly valuable monograph on the subject published by the Department of Agriculture. Exhaustive experiments have been made and a mass of data is here recorded.

Gardens of Medicinal Plants. By Prof. Albert Schneider, of the Department of Pharmacy, Univ. of Calif. An excellent article on this subject, published in the *Am. Jour. of Pharmacy*, Philadelphia, January, 1904.

Are We to Have a United Medical Profession? by Chas. S. Mack, La Porte, Indiana.

Similia Similibus Curantur is the motto of this pamphlet.

Varicella Gangrenosa. Its apparent frequent association with tuberculosis. By William A. Edwards, M. D., Coronado. Reprint from the *Archives of Pediatrics*.

The March issue of the *Colorado Medical Journal* is devoted to "Pulmonary Tuberculosis" as a special number, about double the size of the regular issues. The list of contributors comprises physicians from various parts of the United States, California being represented by Dr. F. M. Pottenger of Los Angeles, Dr. George E. Abbott of Pasadena and Dr. Albert Abrams of San Francisco. The publishers announce that no free sample copies of this special number will be furnished.

"Uncinariasis in Porto Rico," by Drs. Ashford and King, appears in the *New Orleans Medical and Surgical Journal* for March. It seems to be an excellent and exhaustive essay on the subject.

PERSONALS.

Dr. R. V. Day has been appointed City Chemist of Los Angeles.

Dr. Samuel Latta was recently elected president of the Stockton Board of Health.

Dr. Frank Zelinsby has moved from St. Helena, Napa County, to Los Angeles.

Dr. J. L. Carson of Bakersfield has lost his sense of smell through the use of formalin vapor for disinfecting.

Dr. Charlotte Blake Brown of San Francisco has retired from practice. Dr. Brown received her certificate in 1876 and has been a member of the State and County Societies since that year.

Changes of address, San Francisco: Dr. Carlo G. G. Scraparone, 447 Broadway to 309 Montgomery ave.; Dr. John Wagner, 483 Valencia to 2049 Mission; Dr. W. G. Moore, 751 Sutter to 711 Taylor; Dr. W. N. Crothers, 813 Sutter to 819 Market; Dr. McC. Gedge, 406 Sutter to 369 Sutter; Dr. R. A. McLean, 146 Sutter to 2156 Sutter; Dr. A. U. Fuson, 2484 Mission to 2255 Mission; Dr. G. F. Shiels, 135 Geary to 590 Sutter.

SUMMARY OF PROSECUTIONS BY THE STATE BOARD OF MEDICAL EXAMINERS, UP TO MARCH 21ST, 1904.

The following table has been carefully prepared by the Board of Examiners and represents their work along these lines during the past year. There are many instances where illegal practitioners have been weeded out of communities largely through the aid and assistance of the Board, but as no prosecutions were had, they are not here included. A very recent instance of this is the case of Dr. Teaby, who studied three years at the Medical Department, University of California, and graduated from the Col. of P. and S., San Francisco. He did not take the examination before the Board, but opened an office in San Francisco. He left here some time ago. Quite recently he appeared at Monterey, opened an office, joined a few fraternal orders, (in order to get the small money they pay for this "beneficial"

starvation business) and settled down in another community. But Monterey county now has a good lively society, and its members are awake to the necessities of present conditions. Dr. Deckelman wrote to the JOURNAL asking how about Dr. Teaby. The letter was referred to the President of the Board, who at once notified Dr. Deckelman. Dr. Teaby has again gone out of practice. There are many other instances. They just go to show what you can do, if you will try. Why not try? Isn't it just as well to get together and keep the inefficient from possibly allowing some sick people to die before their time? With a good, healthy organization, and with someone keeping a wide-open eye on these gentry, we can, in time, clean up the whole state. But we need your help.

Name.	College.	Verdict.	Sentence.	Remarks.
Dr. Hoekstra	Holland	Guilty	\$100 fine, paid	Retired from practice and promised to take next examination.
Dr. Hoekstra	Holland	Guilty	To be sentenced	Resumed practice; rearrested.
Dr. (?) Chobanian	Armenia	Guilty	To be sentenced	Retired from practice.
Dr. Galehouse	P. & S., San Francisco ..	Guilty	\$100 fine, unpaid	Subsequently passed examination.
Dr. E. H. Anthony	P. & S., San Francisco ..	Guilty	Sentence suspended ..	Was dismissed from position, surgeon P. C. S. S. Co.
Dr. Julian L. Waller	P. & S., San Francisco ..	Guilty	Sentence suspended ..	Patient was examined by defendant and given a prescription and office card. A licensed woman physician testified to having diagnosed the case as the patient passed through defendant's drug store, inferring that defendant was only compounder of prescriptions. The trial judge called this a "bird's-eye diagnosis." Hg and KI given for insomnia.
Dr. J. P. Martin	Cal. Med. College	Guilty	To be sentenced	Convicted on second trial by jury; rearrested; case to be set; now in Nevada.
Dr. Gerow	Cal. Med. College .....	.....	.....	Defendant compelled to leave Fresno by vigorous prosecution by County Society; now located in Oakland; to be set.
Dr. G. Greenwell	Student Cal. Med. Col..	To be set .....	.....	On card given to patients the prefix "Dr." he claims to refer to "doctor of divinity!"
W. J. Loveland	Student	Guilty	\$100 fine, paid	Ceased all professional work.
Mrs. Ladet	"Skin Specialist"	Guilty	Sentence suspended ..	Defendant compelled to remove signs and discontinue all work.
Dr. (?) Hymans	(?)	To be set .....	.....	Closed his office; now in real estate business.
Dr. Max Magnus	P. & S., Chicago	To be set .....	.....	Disqualified as inspecting physician, City Health Department.
Dr. George Herbein	Jefferson .....	.....	.....	Arrested twice; cases to be set.
C. W. von Tiedemann .....	(?) .....	.....	.....	Three warrants for arrest; one served; to be set.
Gerino .....	(?) .....	.....	.....	Three arrests; various writs from Supreme Court cause delay.
Dr. L. Gardini	Italy .....	.....	.....	Arrested four times; cases to be set; now located in Nevada.
Dr. Cassaccia	Italy .....	.....	.....	Left for Nevada after arrest.
Alvin A. Shaw	Northwestern, Chicago ..	To be set .....	.....	.....
C. C. Chappelle	Homeopathic, S. F. ....	.....	.....	Left for Nevada.
"Prof." Synopolis	Itinerant	To be set .....	.....	.....

Proper Commercialism—Physicians, in estimating the money value of their services, should take into consideration the daily and yearly cost of living, to which must be added the interest on the money invested in their education, plus the value of the experience gained year by year in the practice of their profession, and the moral and legal responsibilities involved in the services rendered. Too much stress cannot be laid on the importance of keeping proper accounts and rendering bills to all patients at short and regular intervals, and the sooner these things are generally recognized by the members of the profession the better it will be for all concerned.—*N. Y. State Journal of Med.*

Choice specimens of—it is hard to say whether you would call it "language" or "literature"—you certainly could not call it English—were developed during the taking of expert testimony in a celebrated trial not long since. We have not space for them all, unfortunately, but at least one is too good to be unpreserved. An eminent practitioner of medicine declared, without hesitancy, that the prisoner was, in his opinion, afflicted with "maniacal monomania." The incident reminds one of the old supreme court judge who said there were three kinds of liars: The liar, the d— liar and the expert witness.

ASEPSIS; ESPECIALLY IN THE PRACTICE OF OBSTETRICS.

(Continued from page 125.)

use. I refer to the innumerable experiments on the relative purity of city and country atmosphere. The results both in this country and in Europe have been absolutely uniform; where sterile culture media have been exposed to city air or city dust and incubated at proper temperature, the culture plates show numerous colonies of both pathogenic and non-pathogenic bacteria. The results of like experiments carried on by the same men have been equally uniform and conclusive, when made with the air and dust of country places; practically no bacterial life resulted, even after prolonged exposure of the culture plates, and such as did result were almost without exception of non-pathogenic varieties. The meaning of these results, I think, must be clear to you all, but lest I have failed to express myself clearly, I will put it in another way by saying that we are continually surrounded by a practically sterile medium.

The second factor in rendering us free from the annoyances of attempting complete asepsis in our practice is the greater immunity to bacterial infection of country people, living as they do under more healthful, natural conditions than offered to those who dwell in the city, and hence whose vitality is depressed by breathing air laden with poisonous gases, the foul impurities given off in the breath of thousands of fellow creatures, and whose atmosphere reeks with innumerable bacteria, as we have just seen proven by investigation.

If you will but stop a moment to think, you will realize how true this is, for does not the best talent in our great cities send patients with serious bacterial infection as, for example, tuberculosis, to the country as soon as possible, that they may have the benefit of the vitalizing effect of the country air? Added to these unphysiologic conditions, undermining the resistive immunity of our city brother's patients, are the not less depressing influences of social surroundings and the indulgences which they enjoy—and suffer from. Further, in the country we are continually bathed in bright sunlight, which is so rapidly fatal to bacterial life of all kinds that antiseptics and aseptics are uncalled for, as has been repeatedly demonstrated by the immortal Pasteur and a host of less noted investigators.

But now I think I hear you object that sick people do not show this immunity in common with the well in the country, and while it must be granted that their surroundings are not so menacing as those of their city cousins, yet, should infection unexpectedly occur, they will offer no greater resistance. Quite possible; it is not my

desire to defend my theories, at this time, as applying to our sick in general; my arguments are at present to be confined, as suggested in the title, "especially to the practice of obstetrics."

Here we are, or should be, if we have been properly careful in preparing our patient for the advent of her child, dealing very generally with a person not sick, but simply undergoing a natural physiological event, and quite as resistive, so far as her general condition goes, to bacterial infection as any other healthy person. It is true that should it become necessary to enter a foreign substance, as the hand or an instrument, within the reproductive canal, we are trespassing on ground especially open to insult, and as such should observe reasonable care that we do not introduce dirt, which might, even in our usual clean surroundings, prove a source of infection. But I take it this care need not be of the nature of an elaborate asepsis as is advised in our modern journals and up-to-date text-books, or is practiced by our city brothers. Aside from any danger of bacterial infection, to be clean in clothes, in person and in habits, is a duty that every one of us owes to our patients, and no physician ought to be allowed to practice the healing art who does not give proper attention in that respect.

By reasonable care I mean that it is quite sufficient if it amounts to careful cleanliness, freeing the hands from material which one would not care to introduce from simple consideration of cleanliness aside from all bacteriological reasons. To this end I believe that boiling the instruments sufficiently to clean them, and thoroughly scrubbing the hands with soap and water, followed by alcohol to dissolve any remaining oily matter secreted by the ducts of the skin, is entirely sufficient and is always easily possible. Following this I am in the habit of using soap and water as a lubricant for the fingers, preferring it to oil or vaseline. This, with reasonable cleanliness of person and surroundings on the part of the patient, will invariably lead to successful results in country practice.

It will be seen by what has just been said that I do not in any way discredit a reasonable attention to asepsis, such as may be done by any one, anywhere, but what I do wish to have made clear is that the endless scrubbing, compressing, soaking in antiseptics, douching and the formidable array of antiseptic pack, gauzes and environment indulged in, and perhaps necessary in city practice and recommended in all books and articles, are uncalled for and absolutely unneeded in our practice and surroundings where fresh air and sunshine have removed from our shoulders the burden of sterilizing, in the words of the poet, "everything in sight and some things usually out of sight."

DISCUSSION:

Dr. Stoddard—The paper which the doctor has just read is exceedingly interesting, but I cannot agree with him in every particular. The longer I practice the more firmly I am convinced of the absolute necessity for the most rigid asepsis in the lying-in chamber. It is my custom to use antiseptic vaginal douches of mercury bichlorid or lysol before and after delivery in each and every case. If there is any evidence of infection I use the intra-uterine douche.

Dr. Flint—It is my experience that the obstetric patient in the country requires just as much care and attention as her sister in the city.

Dr. Cunnane—It is my habit to practice absolute cleanliness so far as it may be attained by the use of soap and water, and the use of douches of normal salt solution before and after delivery. An experience of two non-fatal cases of poisoning after the use of I to 5000 bichlorid douches has made me cautious in the selection of intra-vaginal douches after a confinement.

Dr. Vaughan—When I visited Europe the last time the use of antiseptics was not so popular in obstetric work as a few years before.

Dr. Conrad—Reports indicate that bichlorid is not so good an antiseptic or germicide as was formerly supposed, and is not perfectly free from danger in obstetric cases.

Dr. Barry—I practice cleanliness, but do not use antiseptics to any extent in midwifery cases; where an antiseptic is necessary, I prefer a ½% carbolic acid douche.

Dr. Morrey—I do not use douches after confinements because I believe it interferes with the natural discharges.

Dr. Graham said he had waited on several hundred cases during the past twenty years, some of which were under the most discouraging circumstances, without a single death from sepsis in patients that he had control of from the commencement of labor.

BILL TO REGULATE "PATENT MEDICINES."

A bill has recently been introduced in the Legislature of Massachusetts providing for the regulation of the nostrum business. This proposed measure requires that the formula of the "patent" medicine be printed on the label of each container, and provides a fine of fifty cents for each original package not so labeled. Only extracts from the proposed law have thus far reached us, but it seems to offer some excellent suggestions. Of course the law should be so constructed as to omit physicians' prescriptions, but, with that exception, it would seem desirable to compel all manufacturers of anything intended to be used as medicine, in its broad sense, (any substances employed in the treatment of disease), to advertise just what the so-called medicine is composed of. That such a requirement will be bitterly fought by the enormous interests invested in the trade of debauching humanity, is certain. But with a good strong organization could not the weight of this influence be offset? It certainly would seem almost time to begin the effort, for it will doubtless take a good deal of time to put it through. Perhaps it will require the taking of a considerable amount of the excellent advice given recently by Dr. Chas. A. L. Reed, in his address on the "Doctor in Politics." If our Representatives in the State Legislature are at first bought up by the nostrum crowd, it would then be the proper time for physicians to get interested in politics and see that men were nominated for the Legislature who would pledge themselves not to be bought—at least not to be bought by the nostrum manufacturers. Such a campaign could be successful, if well planned and energetically carried out. For a cause so good and a

principle so right, it is not believeable that any physician in the Society would refuse to work, if not called upon to give up too much time.

EDITORIAL PAGES, AND "ADS."

Certain medical journals have been discussing of late the best method of excluding from their pages articles bearing the semblance of having been written by physicians in the interest of manufacturers and importers of proprietary medicines. These journals appeal to medical men to help them. Here is a quotation from an editorial in a recent number of the *New York Medical Journal*: "Meetings of even the most dignified of our societies have at times not wholly escaped the suspicion of having been exploited by the touters for some medicinal or dietetic preparation, and it is certain that papers are often read before them which a reputable medical journal would hesitate to publish." Truly, a deplorable state of affairs. We ought to come to the aid of these reputable journals by tabooing any of our members guilty of such unprofessional conduct as is charged, and we should help these journals still further with the kindly advice that they do not hereafter allow nearly every column of their advertising pages to be taken up with advertisements of proprietary and patent medicines. If it is not right to mention these remedies in the scientific and editorial columns, what makes it right to mention them in any other part of the journals? Can it be the same thing that induces certain hungry physicians to write articles for the wealthy manufacturers? Who are these manufacturers of proprietary remedies that they presume to burden our mails with circulars giving us instructions how to treat our patients? Do they employ a Brunton or an Osler, a Hare or a Behring?—(*Purdy in New York State Journal of Medicine.*)

"Surgical English" is always a delight—when it is not an agony—and generally it adds a pleasurable feeling of variety to the ordinary routine of medical discourse. The *JOURNAL* has noted a few bright gems from the treasury of the surgist (Why not? They say "internist"!) and will gladly note others as they come to light. Latest reports on "operated a case of ——" are good; they show a rather increased usage. A small jewel, though worthy of notice, is "profuse bad drainage"; we are stumped; what does it mean? Another choice specimen is to be recorded, and, would you believe it, is printed in beautiful gold letters on a medical work! It reads: "Complete Medical Pocket Formulary." While the male pocket is numerous, it is not complex—or at least it has not occurred to us that it could need a formulary. Perhaps this is meant for the uncommon but highly complex female pocket.

DIED.

It is with sincere sorrow that the *JOURNAL* announces the death of Dr. Louis A. Kengla, editor of the *Occidental Medical Times*. Dr. Kengla had suffered with an affection of the heart for some time and had been for several weeks confined to his bed. His death on Saturday, March 26th, while not wholly unexpected, will come as a shock to the profession of the Coast, who held him in the highest esteem. Dr. Kengla was president of the San Francisco County Medical Society last year and had been secretary of the California Academy of Medicine for several years. He was a native of Washington, D. C., and a graduate of the Medical Department of the University of Georgetown, D. C., '86. His funeral took place from St. Mary's Cathedral on Monday, March 28th. Rest his soul in peace.

DEPARTMENT OF MATERIA MEDICA, THERAPEUTICS AND PHARMACY.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Calcium beta-naphthol sulphonate	{ Abrastol Asaprol
Creosote Tannate	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine ...	{ Aminoform Ammoni o-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
"", anhydromethylen citrate ..	{ Helmitol
Levulose	{ Diabetin Fructose Fruit Sugar
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin	{ *Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	{ Dulcin Sucrol

Phenyl-dimethyl-parazon . (Germ. Pharm.)	{ Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin
Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	{ Acetophenone Hypnone
Plant pepsin	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine	{ Salochinin Saloquinin
Salicylate of Salochinin	Rheumatin
Sodium sulpho-caffeate	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration	{ Iodothyrene Thyroidin
Trioxymethylen	{ Paraformaldehyde Paraform Triformol

Abrin = Jequiritin

Acetyl-salicylic acid = Aspirin

Aluminum aceto-tartrate = Alsol

Australian oil Eucalyptus = Flucol

Bismuth chrysophanat = Dermol

Bismuth phosphate (soluble) = Bisol

Bismuth pyrogallate = Helcosol

Bismuth subgallate = Dermatol

Bismuth beta-naphtholate = Orphol

Calcium permanganate = Acerdol

Calcium salicylate = Colchicin

Catarin hydrochlorid = Stypticin

Chloreton, 1% solution = Aneson

Creosote carbonat = Creosotal

Diethylen-diamin = Piperazin

Dimethyl-xanthine = Theobromine

Guaiacol carbonate = Duotal

Laricinic Acid = Agaricin

Magnesium dioxid = Biogen

Oxyquinaseptol = Diaphtherin

Phenyl-ethyl urethan = Euphorin

Saccharin = Garantose

Subgallate of bismuth = Dermatol

Sodium chlorate = Oxychlorine

Sodium beta-naphtholate = Microcidin

Tang-Kui, Fl. extract = Eumenol

Trichloroacetic acid, 50% solution = Acetocautic

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

ROSTER OF THE MEDICAL OFFICERS ON DUTY IN DEPARTMENT OF CALIFORNIA.

HEADQUARTERS—Colonel A. C. Girard; First Lieut. John D. Yost; privates, 3; non commissioned officers, 5.

ALCATRAZ ISLAND—Captain A. E. Truby; Contract-Surgeon S. T. Weirick; privates, 12; non-commissioned officers, 2.

FORT BAKER—First Lieut. Louis Brechemin Jr.; privates, 8; non commissioned officers, 2.

FORT MASON—First Lieut. Charles W. Farr; privates, 6; non-commissioned officer, 1.

DISCHARGE CAMP—Contract-Surgeon J. S. Kennedy; privates, 7; non commissioned officers, 2.

FORT McDOWELL—First Lieut. W. J. Lyster; Contract-Surgeon G. I. Hogue; privates, 10; non-commissioned officer, 1.

BENICIA BARRACKS—Contract-Surgeon W. F. de Niedman; privates, 6, non commissioned officer, 1.

SAN DIEGO BARRACKS—Major W. L. Kneedler; privates, 7; non commissioned officers, 2.

FORT MILEY—Contract-Surgeon Victor E. Watson; privates, 6; non-commissioned officer, 1.

HONOLULU—Major W. B. Davis; Contract-Surgeon C. L. Baker; privates 10; non commissioned officers, 3.

OFD BARRACKS—Major W. P. Kendall; Captain Irving W. Rand; First Lieut. Frank C. Baker; Contract-Surgeon F. H. Titus; privates, 17; non-commissioned officers, 3.

PRESIDIO (POST)—Major William Stephenson; First Lieut. E. P. Rockhill; Contract-Surgeon H. N. Kierulff. Dental Surgeons—C. D. S., John S. Marshall; C. D. S., E. J. Craig; C. D. S., Frank P. Stone. Privates, 24; non-commissioned officers, 10.

GENERAL HOSPITAL—Lieut. Col. George H. Torney; Captain J. M. Kennedy; First Lieut. Junius C. Gregory; First Lieut. T. L. Rhoads; First Lieut. E. D. Shortlidge; First Lieut. B. J. Edgar Jr. (on D. S. with insane); First Lieut. Chas. F. Craig; First Lieut. J. L. Sheperd; First Lieut. John H. Allen; Contract-Surgeon L. B. Porter; Contract-Surgeon T. J. Strong; Contract-Surgeon G. P. Dillon; privates 136; non-commissioned officers, 18.

TRANSPORTS—Logan—Lieut. W. T. Davis (on 1. of a.); privates, 4; non-commissioned officer, 1. Sheridan—Lieut. John W. Hanner; Lieut. Alexander Murray; privates, 4; non-commissioned officer, 1. Sherman—Lieut. Cary A. Snoddy; privates, 4; non-commissioned officer, 1. Kilpatrick—Contract-Surgeon J. P. Kelly; privates, 4; non-commissioned officer, 1. Dix—Contract Surgeon James B. Ferguson; privates, 2. Buford—Contract Surgeon Stephen Wythe; privates, 4; non-commissioned officer, 1. Thomas—Lieut. W. A. Powell; privates, 4; non-commissioned officer, 1. Sumner—Lieut. Thomas Devereux; privates, 4; non-commissioned officer, 1.

COMPANY OF INSTRUCTION (No. 2.)—First Lieut. W. J. Lyster; privates, 110; non-commissioned officers, 14.

The following changes have occurred in the stations of medical officers of the Army in this Department:

First Lieut. Carroll D. Buck, assistant surgeon, arrived from the Philippines on the transport Thomas on March 13, and has been assigned to duty with the Philippine Scouts for a tour of duty at St. Louis, Mo. Contract-Surgeons Ira A. Allen, Almon P. Goff, and James M. Feeney, returned from the Philippines on leave of absence. Contract-Surgeon Mills Dennis returned from the Philippines and accompanied the 11th Infantry to Ft. D. A. Russell, Wyo., and then proceeded to his home, Temple, Texas, for an-

nulment of contract. Contract-Surgeon B. P. Norvell arrived from the Philippines for annulment of contract and is assigned to duty with the Philippine Scouts. Contract-Surgeon Titus was relieved from duty at Ord Barracks, Monterey, and is now on duty with troops at the Presidio.

Brigadier-General W. H. Forwood, retired, who was formerly Surgeon-General of the Army, spent a few days in San Francisco during the past month. General Forwood came to California for his health, which was completely restored before he left town. He had many interesting things to say about Panama. He was the guest of Colonel A. C. Girard, Assistant Surgeon-General, Chief Surgeon of the Department.

Weeds Used in Medicine.—The U. S. Department of Agriculture has just issued Farmers' Bulletin No. 183, entitled, "Weeds Used in Medicine." The bulletin was prepared by Alice Henkel, Assistant in Drug and Medicinal Plant Investigations, Botanical Investigations and Experiments, Bureau of Plant Industry.

Attention is called to the fact that certain well-known weeds now either generally or locally infesting the country are the sources of crude drugs at the present time obtained wholly or in part by importation from abroad. Roots, leaves, and flowers of several of the species most detrimental in the United States are gathered, prepared, and cured in Europe and not only form useful commodities there, but supply to a considerable extent the demands of foreign lands. Hence it appears probable that while weeds can hardly be made desirable, still in his fight to exterminate them the farmer may be able to turn some of them to account. Some of the plants coming within this class are in many States at present subject to antiweed laws, and farmers are required to take measures toward their extermination. It seems, therefore, desirable to make these pests sources of profit where possible.

The prices paid for crude drugs from these sources are not great and would rarely tempt anyone to pursue this line of work as a business. Yet, if in ridding the farm of weeds, and thus raising the value of the land, the farmer can at the same time make these pests the source of a small income instead of a dead loss, something is gained.

In order to help the farmers to obtain the best possible results for such products, instructions for collecting and preparing crude drugs from weeds are briefly given.

The plants mentioned in the bulletin are burdock, dandelion, the docks, couch grass, and pokeweed (principally root drugs); foxglove, mullein, lobelia, tansy, gum plant, scaly grindelia, boneset, catnip, hoarhound, yarrow, fleabane, blessed thistle, jimson weed, and poison hemlock (of which either the leaves, flowers, herb, or seeds are used in medicine); and also wormseed, and black and white mustards, of which only the seeds are used.

The bulletin contains 31 illustrations of the weeds described. It is for free distribution and can be obtained on application to Senators, Representatives, and Delegates in Congress, or to the Secretary of Agriculture, Washington, D. C.

It is reported that the number of suicides in Chicago is steadily increasing. During last year 459 are reported, of which number 239 were married people. So many as 169 chose to depart by the carbolic-acid route, and while it is not difficult to account for a large number of suicides in Chicago, it remains a mystery why so many of them choose carbolic acid; perhaps it is not so worse as Chicago.

California State Journal of Medicine.

OWNED AND PUBLISHED MONTHLY BY THE
Medical Society of the State of California

PUBLICATION COMMITTEE

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Members of the Society are requested to promptly notify the publication office of change of address, in order that mailing list may be corrected. Secretaries of County Societies are also requested to notify the "Journal" of deaths, removals, etc., and send in names of new members and their postoffice address.

Communications on subjects of interest to the profession are invited. The "Journal" is not responsible for the views advanced by correspondents. Address letters relating to the "Journal" to the publication office, Room 1, Y. M. C. A. Building, San Francisco.

MAY, 1904.

NOTICE OF REMOVAL.

The Publication Office of the State Society is now established in Room 1, Y. M. C. A. Building, corner Ellis and Mason Sts., San Francisco.

EDITORIAL NOTES.

The address of the outgoing president, Dr. Ellis, contains so much food for careful thought that it is almost unfair to comment upon only a portion of it. **ORGANIZATION AND POLITICS.** Probably the gist of the text on which Dr. Ellis preached so well, may be given as indicated—our duty to the public as represented in the direction of organization enabling us to exert our strength to benefit state and national affairs—politics. Let every man take to heart one sentence: "Whenever medicine has touched politics, politics has been bettered; but whenever corrupt politics has touched medicine, medicine has been smirched." Probably nothing in the whole address is more true nor better good sense than that statement. Think of all the times when you *know* that corrupt politics has prevented some legislation much needed for the public welfare; think of the number of times that undue influence has been brought to bear to the end that some wise medical act might be overset. Look at the present state of things in Washington, where the biggest and most corrupt lobby that the Capitol has seen for a generation is working against the very thing for which the people are suffering—a pure food and drug law

that will do some good. And this lobby is composed of those who ruin more lives each year than any other class—the nostrum and "patent medicine" manufacturers. Is it not time the doctor got into politics and stayed there? Is it not time that we had more men elected to legislative offices who are pledged to support right legislation? Can you not see your duty, and will you not do it?

The very able Address in Medicine, read at the recent meeting of the State Society by Dr. Rooney, accentuates a point that has been raised in various parts of the State within the past year—the relations between the proposed municipal or State laboratory or preventive medicine. One could not ask for a stronger presentation of the case than that furnished by Dr. Rooney. Himself typical of the foremost rank in that great class of physicians—the country practitioner—his words come to us with added weight. Many times, in the history of medicine, common sense and keen reasoning have effected great improvements. But these are exceptional cases. The laboratory, with its near approach to exact science, has been and is bound to be the great agency in advancement, and particularly in the further development of preventive medicine. The country doctor who has much practice and lives up to his unwritten obligations, cannot, in the very nature of things, devote much if any time to laboratory work. He does not suffer, through his natural inability, through the very essential limitations of his environment, but the people do suffer and their suffering is at the cost of the State. For it is the producing people who make the strength of a State and of a country; one hard-working, God-fearing farmer is worth several generations of modern "financiers."

Time was, and not so long ago, that the dividing line between medicine and surgery could be fairly well drawn. But that is fast becoming impossible, and each passing year makes the task still harder. Conditions which a few years ago were unhesitatingly classed as medical, are now regarded by the surgeon as well within his own domain. And it is not difficult to see how this should be so. Primarily, it is due to greater accuracy in diagnosis; and secondarily, to more rational and common sense views based upon this more accurate etiology. In the old days dysentery would, unquestionably, be classed as a strictly medical complication. But we have now learned pretty accurately not only its actual cause, but its particular field of limitation, and already is the challenge filed. The Address in Surgery delivered by Dr. J. Henry Barbat at our recent

meeting, published in this number, gives a practically complete resume of the various expressions on the subject up to date, and Dr. Barbat certainly presents the case for the surgeon. In brief, the argument is simple. We have a certain section of the gut which is the seat of trouble due to its infection by organisms that live and thrive upon its normal contents, and which ordinary remedies seem to affect but little. Why not separate this section from the healthy, give this portion of intestine a complete rest, and thoroughly cleanse it from its contamination of germs? The argument is direct and simple; the discussion, in the months to come, should prove interesting.

Under this caption the *Journal of the American Medical Association*, in a recent issue, complains bitterly of the demoralized condition of the drug store to-day. It is too true that the average drug store looks like a department store gone astray, or the wagon of some itinerant.

Commercialism has invaded entirely too much the proper domain of drug dispensaries, and it seems time for concerted action on the part of the medical profession to bring about the necessary reform. Meantime, much may be done to discourage the growing evil if physicians will encourage the filling of their prescriptions at pharmacies where more attention is paid to the proper dispensing of legitimate medicines than at the almost department-store variety shops that maintain a counter for prescriptions, but very evidently consider this an entirely secondary feature of their business.

But why shirk the blame and lay it all on the pharmacist? Who is it that can no longer write a prescription for his patient without "specifying" somebody's preparation, or somebody's mixture? The evil has grown from small things to large, but the pharmacist is not the only one who has nursed it along. The medical profession is quite as much responsible for the degeneracy in pharmacy of the day as is the druggist. It is the doctor who has been for years forcing the pharmacist from his profession into "commercialism," until now at least 75 per cent of the medicine used is ready-to-take mixed stuff which the manufacturer recommends for some line of ills, and the physician knows nothing about. Did the pharmacist commence the delightful game by asking the doctor to "specify" some particular make of chemical, because only one house could make it pure? Did he continue it by asking the doctor to "specify" some manufacturer's "preparation" of a U. S. P., or National Formulary preparation that he could make just as well himself, and at vastly greater profit? Did he further increase his own bad plight by asking the physician to "prescribe" (Heaven save the mark!) some "proprietary mixture" the formula of which the manufacturer did not wish to disclose for commercial reasons? Is

it the pharmacist or the physician who is so densely ignorant of his own profession that he accepts unquestioningly the idle statements that are told him; who does not know that *hexamethylene tetramine* is *hexamethylene tetramine*, even though it masquerades under seven different names? Is it the pharmacist or the physician who is so poorly equipped with information as to believe that different specimens of a chemical, having the same melting point, and in every other known respect the same identical thing, can have different therapeutic qualities? Is the pharmacist the only guilty agent in the prostitution of a noble profession to the ignoble greed of ignorant but unscrupulous manufacturers? Is it the pharmacist who first prescribes some nostrum "in the original package," to avoid substitution (of what, God only knows!) and then realizes that the patient can go to a store and ask for the same thing without first consulting the doctor? There is hardly a pharmacist in the country who would not gladly rid himself of half his stock of clap-trap stuff, if he could; but the physician will not let him, because, forsooth, he does not know enough about his own profession to know what he is using or what he is making the druggist do. It would be an even bet that the very editorial in question was written with a pencil bearing the name of some manufacturer of a "proprietary" medicine, the exact formula of which no one but himself and God can know. A little more talk about "doctors' ethics" would be more to the point. "First take out the beam which is in thine own eye."

If final action has not been taken on the "Heyburn Pure Food and Drug Bill, or H. R. 6295,"

before this issue of the *JOURNAL* reaches you, you should at once write to the Hon. W. B.

Heyburn, U. S. Senate, Washington, D. C., and assure him of your hearty approval of this measure. Also write at once to the two Senators from this State and urge upon them the necessity of working for the passage of the bill. At the time of writing there is a fierce fight against it, put up by the manufacturers of secret proprietary medicines, nostrums, etc., and the blenders of bad whisky. The bill is very much the same as the bill that passed the House last year, but got lost in the "celebrated chamber of antiquities," the Senate. It establishes standards for foods and it provides for the proper formulation of standards for drugs and foods, and provides for their maintenance. It furnishes much that the people of the United States need, and that the medical profession has long suffered for. The fight is the fight of decency against unscrupulous greed, dishonesty, charlatanism,

quackery and fraud, and it behooves every self-respecting medical man in the country to make his influence felt.

Many of the better class of manufacturers of pharmaceutical preparations have repeatedly advised the editor that they decidedly approve of pure food and drug legislation, such as is now pending in the Senate. This is a pretty good time for them to demonstrate the truth of the claim. Let them exert a little of their strength and influence—for they have plenty of both, and enough money—in counteracting the tremendous lobby now working against the Heyburn bill. A little of the practical politics which they all know so well how to use would fit in very nicely, just about this time, and would be a substantial indication of the truth of their pleasant-sounding words. We believe that many of them are honest in expressing themselves as they do in this matter, but there is a doubt that they will come out into the open and stand for the bill. Gentlemen, will you help us?

In its last issue the JOURNAL printed an editorial referring to this company, and more particularly to its "referee for this territory." We were advised that Dr. L. L. Dorr, long a distinguished member of the State Society, had retired from the office of referee and had been succeeded by Dr. W. W. Underhill. As the JOURNAL did not care to make the matter a personal one, no name was mentioned. We are informed by Dr. Dorr that he has not retired, but that Dr. Underhill is working in his office as inspector of risks and alternate medical examiner. The balance of the statement made is acknowledged to be true. The gentleman in question is a graduate in good standing and a member of the Missouri State Medical Association, but he has no license in California. Technically, the law would not apply to such cases; morally, it should, and these large and reputable corporations ought to be the first to live up to the uttermost letter of the statute, for their own protection if for no other reason. We are doing every possible thing to clean up the ranks of the medical profession and to keep them clean, and it is just such concerns that should help in the good work. As illustrative of his good standing, the JOURNAL is advised that the gentleman in question is a member of the A. M. A. In return we would respectfully call attention to the fact that, if he continues to reside in this state, he cannot retain his membership in the Association unless he becomes a member of a county medical society, and to do that he must be a licentiate.

Two things are very apt to be overlooked in considering this question. One is the fact that very few people seem to know or care whether they are getting pure milk or not; it all tastes alike to them. The other is the proper consideration of the producer. Unless all producers can be reached and dealt with, the factor of dishonest competition is bound to discourage the fondest endeavors. With the overwhelming majority of people, price is the one and only consideration involved in a milk transaction. Indeed, it is reported that in the great city of Philadelphia only three hospitals paid the slightest attention to the quality of the milk supplied them; with all the others it was simply a matter of price. When this sort of thing is found to exist in the one place where it should not be dreamed of, what can one possibly expect from the ordinary consumer? Certain fundamental requirements should be legally fixed and enforced upon all producers alike. But further than this, much educational work must be done by the medical profession if we are ever to awake the public to a realization that all milk is not alike, though it may taste so, and that price is not the only consideration—especially where the lives of children are at stake.

It is not very pleasant, when you have treated any one decently, to find that you have been lied to and imposed upon. Also, it is unpleasant to be forced to apologize for having innocently aided at an imposition. The JOURNAL offers its sincere apologies to each and every member of the Society, and to each one of its advertisers. For three months it printed a half-page advertisement that was a lie and a fraud. Fortunately a kind friend who is better posted upon subjects chemical than is any member of the Publication Committee, was good enough to point out the lie. Needless to say, the advertisement has been dropped. The firm indulging in this questionable—or rather, unquestionably dishonest—sort of thing, is the *Gardner-Barada Chemical Co.*, of Chicago. The advertisement was accepted only on the clear written understanding that a truthful formula should accompany it. The formula which these gentry sent in and which was published with their advertisement, proves, on investigation, to be purely mythical. There is no such chemical as "Lithium methamine," and the best chemists advise us that there cannot exist any such salt, or any other salt, of formalin. The obvious conclusion is that the stuff contains ingredients that are dangerous, or for which the manufacturers are ashamed, and it would seem well for the members of the Society to bear that fact in mind, and to leave this preparation (*Uriseptin*) absolutely alone.

Some confusion seems to have arisen in the minds of a few of our advertisers as to the meaning of an editorial in the last number of the JOURNAL. In that article we condemned the practice of printing "bizarre or grotesque" illustrations, and stated that the things using this sort of spectacular advertising were apt to be pretty poor stuff. There is a lot of difference between a decently gotten up illustrated advertisement of a reputable house and a non-secret preparation, and the sort of stuff that requires skeletons, emaciated men under umbrellas, scrawny hands clutching at swollen feet, infants writhing in pain, and a lot more of that sort of thing. If those who have criticised the JOURNAL for the editorial utterance referred to will be good enough to re-read it, they will probably see that they could not be referred to. So far as we are aware, there is not one of the good houses in the country that indulges in this vicious advertising; nor do they advertise the sort of preparations which would need the bolstering and the forcing of the nature suggested. We are very proud of our advertising pages and of our advertisers; they are first-class, reputable houses, and we have from the first stated it as our policy to print no advertisement of a house for which we could not tacitly vouch. It would be an excellent thing, and a courteous, for the members of the Society to remember this, and to patronize our advertisers as much as possible, whenever such preference may be shown without disadvantage.

The session of the Sanitary Conference held at Paso Robles on Monday, April 18, was a very notable meeting. The attendance was large, and those present took great interest in the subjects presented for discussion. The question of milk supply was thoroughly gone into, the unanimous opinion being that proper measures for control of dairies and milk supply should be carefully drafted and put into effect as expeditiously as possible. In considering this question, the recommendations of the Department of Agriculture should not be overlooked. The Department has carefully studied this matter, and recommends the plan of certification of good dairies and good milk, rather than any condemnatory procedures. Condemnation seldom, if ever, does any particular good. The absolute necessity for a law granting the State Board of Health more extended powers was clearly brought out. At present it can act only in an advisory capacity; it should be given power to enforce its advice. Another question of great importance is that of vital statistics. This matter is in reality more urgent than probably the majority of physicians realize, and will be discussed at some later time. Dr. William LeMoyne Wills, of Los Angeles, was elected president for the ensuing year.

A second year's work has demonstrated the wisdom of placing all the business of the State Society in the House of Delegates and thus relieving the general sessions of everything except scientific work. Never has there been a more harmonious meeting of the Society, and though a great deal of business was transacted, it was done without wrangling and expeditiously. It is to be regretted that all of the county societies were not represented, and the duty of electing some man who is sure to attend the meeting is one that should not be overlooked. The number of societies thus not represented was very small, however, and the fact was evident that keen interest in the Society and its work is felt all over the State. The new constitution and by-laws, practically as recommended by the committee, and with only minor alterations, was adopted, section by section, on the evening of the first day, and the centralization of work ought to prove an advantage and effect a saving of considerable time and labor. The sessions of the house in future will probably not be so long; and it is to be hoped that we will not have to adopt another constitution and by-laws for some time to come.

At Paso Robles there were a number of suggestions in regard to future issues of the Register.

If the members of the Society who have alterations or ideas to suggest to the Publication Committee will kindly write them out and send them to the Committee or to the JOURNAL office, they will be welcomed and carefully considered. It is the sincere desire of the Committee to place in the hands of the members of the Society a book that will be of the greatest benefit and help to them. A number of improvements have already been decided upon and will be incorporated in the next issue. Please do not think that we are averse to criticism; it is the only way in which we can hope to improve.

MEETING OF THE A. M. A.

The next annual meeting of the American Medical Association will be held at Atlantic City, N. J., June 7-10.

The railroads will give special rate of one fare for the round trip from this Coast—two times a week. Inquire of agents for further particulars.

WHAT SHOULD BE THE PHYSICIAN'S POSITION IN THE BODY POLITIC?

PRESIDENT'S ADDRESS.

By H. BERT. ELLIS, M. D., Los Angeles.

Delivered at the Thirty-fourth Annual Meeting of the State Society, 1904.

EACH man, in his time, plays many parts, and the parts which should be played by our profession may well occupy us for a little while.

The logical relation of Medicine to Sociology has very naturally created some peculiar types of fame for physicians. Oliver Wolcott, a signer of the Declaration of Independence, who led in the foundation of Medical Societies and Journals, is better known as a financier. Benjamin Rush, an alienist, clinician, hygienist and hospital reformer, incurred more enmity by his political conduct than he won fame by his medical science and patriotism; he was a signer of the Declaration of Independence, yet, through criticisms of the "little-great" Colonial nobodies of New England, Virginia and Pennsylvania, he created so much offense that the animosity of their descendants still pursues him, so that as yet the National Capital has not his monument.

The quaintest instances of extra medical fame of physicians are found in Guillotin and Gatling, the inventors respectively of the guillotine and the Gatling gun.

It is difficult to say whether Souberbeille owes fame to being a regicide or to his genito-urinary surgery in the domain of bladder calculi. He combatted the crushing of calculi with as much vigor as he opposed the Bourbons; he survived the French Revolution to take part in the movement that placed Louis Philippe on the throne in 1830 as Citizen King. While Souberbeille voted for the death of Marie Antoinette, he insured her better treatment during imprisonment.

It is an open question whether the fame of Erasmus Darwin, the grandfather of Charles, rests more upon his medical treatise, *Zoonomia*, once so great a favorite in the United States, or upon his poetry, still extensively quoted. Keats, who was better known as a poet than a physician, unlike Darwin, never actively engaged in practice. Many physicians who have been as eminent in other fields as in medicine might be mentioned, as for instance, Huxley, Virchow, Wier Mitchell, Hammond and, not to be negligent, our own Bullard.

We have found that knowledge of medicine adds to the efficiency of those possessing it. That it is compatible with many things else—law, preaching, literature, painting, poetry, natural history, exploration, astronomy, invention both in the arts of war and peace, and adds dignity, honor and usefulness to a man in any profession. But a physician who knows nothing and does nothing but his professional work, is ordinarily a poor doctor and is more than likely to be at outs with the whole community. Narrowness of interest creates narrowness of mind, and no vocation needs broader minded grasp than medicine.

Every doctor should have some hobby or recreative employment or study, outside of the mere lucrative side of his profession. Every practitioner of medicine should do more or less politics, and I use politics in its broad sense, that is, to augment the strength and resources of a Nation or State and to protect its citizens in their rights and to preserve and improve their laws. In this sense, the physician may do much politics without being in any sense a party politician, for there is a positive and vital relationship between medicine and the scientific principles underlying social conditions and phenomena. Whenever medicine has touched politics, politics has been bettered,

but whenever corrupt politics has touched medicine, medicine has been smirched.

The relation of social conditions to disease is a topic that is becoming more and more insistent, with the reflections that are the natural accompaniment of advancing knowledge, and it is incumbent upon the physician to give more attention to the public health.

For a doctor to neglect personal attention to civic and political problems is selfish and unjustifiable. His educational advantages, his specific knowledge of sanitary requirements, his trained judgment, his self-restraint and poise in responsible situations, his familiarity with the vagaries of human nature, and the respect shown him by his fellow-citizens, make him eminently qualified for executive work, and even leadership in civic affairs.

The man of education, brains and capability owes a certain part of his day to the community in which he lives, and to the associations with which his personal success and happiness are due. If he does not give it, he is not doing his full duty to mankind. The greater the advantages he possesses, the greater the call to serve his fellow-man. Few men, as a class, have a greater personal capacity than physicians. Therefore, few owe more to the State.

The doctor should aid personally in the endeavor to raise the standard of health, education, art and honesty in the region in which he resides. Time may be required to convince his community that sanitary plumbing, pure water, and compulsory vaccination pay. Men of lower ideals may deny that official dishonesty and public indecency sap the vigor of a village, town or city, and inevitably lead not only to higher taxes, but also to diminished personal safety. These truths may be inculcated while carrying on his daily professional work, and he will find that his life is more valuable to his fellow-man than that of the doctor who, from laziness, carelessness or timidity, neglects his civic duty, under the pretense that his professional work is too exacting to permit such diversion of energy. The doctor's work for the State must have, to be successful, the same quality as his work in medicine. Courtesy and sincerity, honesty and courage, earnestness and intelligence are as essential in the one as in the other. He must be willing in both activities to labor without thought of personal reward.

The membership of physicians on school boards is an undoubted advantage to the public. First, physicians are better able to cooperate and work with the local boards of health, and are therefore better able to demand proper sanitary conditions in school buildings and grounds; secondly, because of the nature of their work, they are better able to comprehend the necessities of the scholars in regard to seating and desks; the tinting of the walls as affecting eye-sight; the necessity for correctly lighted rooms, and that the wall boards should not be black. The physician is in a position to insist that the curriculum shall be somewhat elastic, as all children have not the same mental development or capacity. No one is in a better position to judge of the evil effects of child labor, not from the sentimental, but from the physical standpoint, and therefore he will be in a position to ask for compulsory educational laws, and see that they are lived up to.

There is a feeling abroad, occasionally expressed by physicians and newspaper writers, that there is overpressure in the schools to such an extent that children are falling by the way or are made invalids for life. There is another opinion, expressed quite frequently by opponents of the new education, that teachers are doing too much for their pupils, and are thereby helping to create a race of degenerates. "Soft pedagogics" is the term sometimes given to designate the process. Widely divergent as are these criticisms

of the present practice in the schools, there is perhaps enough truth in both charges, to put teachers on their guard in respect to the demands they make upon their pupils. Viewing the matter solely from the standpoint of health, we may agree that hard, intellectual work of the right kind, done within proper limits of time, can in no way be injurious to children. It must be as healthful for them to exercise the brain actively as it is for them to exercise the legs actively. It is not hard work that is harmful or repugnant to the normal child, so much as work which is not suited to his needs and powers. Of course, a discrimination must be made between the natural tendencies of the child and those tendencies which have been imposed upon him; the former may lead and point the way of the best training, while the latter may indicate the course to be resisted.

What is needed for health's sake is not necessarily to lessen the work of the children, but to lead them to work in such a way and at such times that the largest results in mental strength and alertness will be gained with the least fatigue.

Some study cheers and invigorates, while other study palls upon the mind and wearies it to the point of stagnation. No one will say that the former is nearly so harmful physically as the latter. The two states of mind needed for the physical as well as for the mental wellbeing of pupils are interest and freshness, the former depending largely upon the subject and the way it is presented, and the latter upon the times in which the recitation or study is carried on.

In America, we know sanitation and social progress as the power that condemns rookeries; restricts builders; regulates hours of labor and the age of laborers; builds hospitals, public baths and lodging houses; sets aside great areas for parks and playgrounds; establishes sanitariums for consumptives; inspects factories and mines; defines dangerous trades and prescribes territorial limits to those that pollute streams or air; compels vaccination; certifies physicians, dentists, druggists and barbers; quarantines the sick on land and sea, separating mothers from children; condemning property, if need be; rejects immigrants; enters lodging-houses, and even dwellings, to determine their sanitary condition; prohibits the adulteration of foods and medicines and penalizes the sale or offer for sale of impure foods for man and beast; presumes to name certain fuel as unfit; spends millions for water-works, sewage farms and the support of health departments.

No one community has carried out a consistent and thorough program, but no community has failed to accept the principle that the public has the right and the duty to remove and to prevent disease or conditions that generate disease. We may differ in our theories of disease, or in our belief as to the exact time and place where the public funds shall be used, but we are of one mind that private wealth, private ignorance, private comfort must be of secondary importance, when and where public health is at stake.

Sanitary administration offers a very direct and most efficacious means of reducing the inequalities that even the most conservative capitalist will concede to be incident to our present system of distribution. The meanest wage earner has already come to associate his health with his capital; his lodge, his creditors and his insurance company are emphasizing that relation. None is so mean as not to wish a higher standard of life. Nothing is easier to demonstrate than that wide and clean streets, playgrounds, hospitals, public baths, tenement and factory inspection help to raise his minimum standard with no sacrifice to himself. In no other field have conservative thinkers and communities taken such advanced ground; conversely, no other field offers so little

theoretical opposition or so little prejudice. No other field of administration can demonstrate so quickly and so readily on the platform or by actual test, that there is taxation which benefits without burdening the majority.

In watching contagious diseases in the public schools it is a great advantage to have the Medical Inspector directly under the control of the Board of Education, and not under the Board of Health, since only about one-seventh of the cases of contagious diseases in the public schools are reported by the Health Department. Chicago has a rule that when pupils are out four consecutive days, they are excluded until they have been inspected by the proper authorities. They are not accustomed to admit children upon the certificate of the attending physician, because such certificates they consider utterly valueless, for the reason that physicians cannot easily refuse giving certificates, their livelihood being at stake in many cases.

It is believed that American philanthropists, whose purses have so often and so generously opened to advance the causes of human knowledge and welfare, have failed to appreciate the opportunities which have lain before them in promoting the cause of sanitation. Every school, college and university should have a carefully developed course of hygiene. Every parent who sends a son or daughter to these places of education has a right to expect that this fundamental subject of life and health shall not be neglected. Competent teachers are needed to instruct the children and youth of the land in the practical business of living wholesome and healthy lives. Sanitary engineers are needed to build sewers and water-works, drain lands, and lay out and clean cities in accordance with modern principles. Sanitary architects are needed to build healthy dwellings, hospitals, schools and factories, so that the great class of people who are unable to look out for themselves, shall be suitably cared for. Medical officers of health are needed who shall be familiar with the most recent developments of preventive medicine, and who shall be thereby equipped with the best methods of investigation and removing the cause of epidemics. The family physician should be given knowledge, which, as President Eliot says, shall make him the guardian of his clients in the prevention of disease.

University students are but rarely compelled to study sanitary science, and it is entirely possible for a graduate receiving the highest honors to know next to nothing of the laws of health, upon which his very existence depends. But if school children, teachers and university students find a lack of proper facilities for the study of hygiene, what is to be said of the training of that important class of officials charged with the responsibility of guarding public health? As a rule no training whatever is required of health officers by law, and no provision is made by municipality or State for their instruction.

Excepting in Vermont, and a few other states, it is impossible for health officers to obtain any preparation for their work, except such as they may themselves elect in special courses of instruction in the latest practices in sanitation and preventive medicine. The requirements which must be satisfied before the English degree of D. P. H. is conferred, indicate the character of the training, which, in the opinion of the Committee of the American Public Health Association, it is needful for this class of experts to obtain. As at present constituted, the requirements of the English diploma in public health stipulate that the candidate must be a physician, and have had six months scientific training in hygiene, including sanitary law, sanitary administration, laboratory instruction in sanitary chemistry, bacteriology and the study

of preventive diseases. In addition, he must have served six months as an assistant to a medical officer of health.

Dealing with disease is much more complicated than dealing with crime. Our individual danger is ten times greater from epidemic than from murder, robberies, accidents and fires; yet, as a rule, our police and fire departments excite our admiration, while our squad of health inspectors more often arouse our anger and opposition.

Physicians are said to be deficient in business instinct, training and methods, but much depends upon the individual. There are many so-called business men who seem to know but little about business, if we would judge by the number of failures and those who go out of business.

The entrance of physicians and scientific men into deliberative assemblies must do good, for the increasing accuracy of science cannot fail to make its impress felt in shaping legislative policy. Sanitary and hygienic problems are of ever increasing importance in national life, and physicians have the general training which makes their views on these subjects of much weight. The interests of commercialism and science may seem antagonistic, but in the broadest sense they are not.

It should be almost unnecessary to recount to a society of physicians the numerous reasons why an accurate registration of vital statistics is absolutely essential to the proper sanitary administration of a State. Vital statistics, and especially correct mortality statistics, are fundamental to a progressive public health administration. It is as unsatisfactory to attempt to conduct a public health service, either of a city, a state or a nation, without reliable statistics of mortality based upon the immediate registration of all deaths, as they occur, as it would be to manage a large business enterprise without some adequate system of book-keeping. To know the influence of modern methods of sanitation and prevention of disease upon the public health, the statistics of deaths must be accurately known. The progressive health officer must be upon the alert to watch the movement of mortality from important diseases, and he can only judge of his success at restricting the same by studying variations in mortality and in sickness.

Reliable records of births are almost of as much importance as are those of deaths. The State owes it to the individual citizen that an accurate record shall be made of his birth and his death. Such records are indispensable for many legal purposes. As regards birth records, there is hardly a relation in life, from the cradle to the grave, in which such a record may not prove of the greatest value. For example, in the matter of descent and inheritance; in the relations of guardians and wards; in the disability of minors; in the administration of estates; the settlement of insurance and pensions; the requirements of foreign countries in matters of residence; marriage and legacies; in marriage in our own country; in voting and in jury and military service; in the right to admission and practice in the professions and many public offices, in the enforcement of laws relating to education and child labor, as well as to various other matters in the statutes. As the country becomes more densely settled, and the struggle for existence sharper, many of these matters which have hitherto been of minor significance, will take on a deeper meaning and acquire greater importance.

Nearly every State in the country has attempted to establish a satisfactory system of recording vital statistics, yet up to the present time less than a dozen have adequate laws for the registration of

deaths alone, and I believe that there is not a single State, and probably not even a single city in the United States, that has today a complete registration of births. This should receive the attention and the active support of every doctor in the State, and especially the consideration of our members and our county societies. I therefore recommend to this Society that a committee of three be appointed on vital statistics, to coöperate with the Public Health Committee of the American Medical Association.

The executive business of medical schools, hospitals and societies devoted to medical subjects is what may be, and frequently is, termed medical politics. Here the doctor has frequent opportunity of showing his skill in carrying on business enterprises, and may exercise the talent of leadership. His success is probably equal to that obtained by men of equal ability in any one other walk of life. He may lack the training of one brought up in an office or bank, but his stock of general information, his knowledge of human nature, his judicial mind, and his habit of scientific accuracy, will soon enable him to equal, if not outstrip his non-professional colleague, in executive grasp and precision.

What is essential that the standard of the medical profession be raised and that the physician become a more potent factor of usefulness in the community? Of the students attending professional schools in 1900, 50 per cent of the theological students had an academic degree; 20 per cent of the law students, and only 7 per cent of the medical students. Ordinarily, the degree of preparation one has upon entering a professional school, represents the character of work he will do in that school. One cannot expect to secure physicians wise and comprehensive in diagnosis, keen to discriminate, able to weigh evidence and to relate every fact to every other fact, unless the students who enter the medical colleges are themselves well trained. In professional studies the beginning determines the end, and the end also determines the means and the method: he who is not a good student when he enters the professional school, will not ordinarily be a good student when he leaves it; and if he is not a good student when he leaves the professional school, he will not be a skilful doctor when he begins his professional career. The medical profession, as already indicated, is important not only to the individual life, but also to the life of the whole community. The doctor should become a public servant, as well as a servant of individuals. He is now set not simply to cure the ills of one member of the human race, but also to keep all men from being sick. He is a trustee for the health of the community. He should be the apostle of health and healthfulness. He is an unofficial member of some unofficial board in every community, and in not a few communities, he is a member of the properly constituted Board of Health. The age of specialists has come, but every general practitioner must, in a sense, be a combination of all the specialists. So wide a range of functions, each of which is of peculiar importance, as important at times as is human life itself, makes very evident the proposition that the physician should have the most liberal, the most profound, and the most disciplinary of trainings before he enters upon his professional studies. And further, Americans should be in touch with the best methods of the most advanced nations, and our standards should not be lower than those of European countries.

It would be a distinct advantage to American life, if the students who have stepped from the farm or the grocery store into the medical school, would return to their farms or their counters. Discipline, as well as culture, training as well as intellect, represent

elements which every man who dares to offer himself as the savior of people's lives should possess. One great need of American life at the present time is better trained doctors. The more thorough their training, the better fitted will they be to assume their obligations as citizens in the higher fields of civic usefulness. The mind which has already been sharpened by the methods of one science, takes a keener edge, and that more quickly, when it is put on the whetstone of another science, than does a mind which knows nothing of science, for all sciences are cognate, their methods, though different, are allied. Our profession has been the mother of most of the sciences, and her children are ever coming back to help her. In our art, all the sciences seem to converge—physical, chemical, biological methods join hands to form the complete clinical method.

If the proper organization of physicians existed, a health officer, Democrat or Republican, doing a city such service as to reduce its death rate from 23 to 1,000 per year to 15 to 1,000 per year for successive years, or fighting the dangers of a pest epidemic, would not be turned out of office for partisan reasons, as was recently the case in the city of Buffalo, and our own city of San Francisco.

Very recently Reed and Lydston have clearly pointed out the fact that medical men have fallen from their high estate of bygone years and are no longer looked up to and regarded as the leaders in every community. That much of this change in public attitude toward members of this profession is due to the dissensions within our own ranks, there can be no doubt. The influence which the physician of fifty years ago possessed, has dwindled to a mere shadowy suggestion of influence possessed by the doctor of today. Instead of in any way controlling the quality and standards of the medicines supplied for our use, we are now become very largely the exploiters of such material as the manufacturer cares to place upon the market. Instead of having that representation within Legislative chambers which would insure proper protection of the public welfare, we have little or no representation and comparatively no influence. One of the keenest and ablest lawmakers in the land has said that the medical profession could secure any legislation which it demanded, State or National, if it only knew exactly what it wanted and could agree in making the demand.

The time has come when we must recognize our duty to the body politic; our duty to the people whose servants we are; our duty to our patients; our duty to ourselves and to our progeny; our duty to the coming generation, by taking that place in the affairs of the State and the Nation which good government, good sanitation, good health laws, and proper protection of the public welfare demand. The "Doctor in Politics" must become an established fact and must become a recognized necessity. It is time that at least one Representative from every State in the Union, should be a member of the medical profession, and that there should be a good number of doctors seated in the Senate. We have too long been like the foolish man in the parable, who buried his talent, carefully wrapped in a napkin. Let us dig up these talents of potential strength and influence and invest them as they should be invested—in the political part of our duty to the people we serve. Let us at once begin to work for that place in our State and National Legislatures which the care of the public welfare demands that we should have. To sit quietly back and see inefficient or morally bad men elected to Legislative offices and making laws which are worthless or positively and actually injurious to the public is to neglect that part of our duty which is most essential. The plea that the doctor is too busy to take any part

in politics is an empty phrase. No doctor is too busy to drop a word here, a request there, a hint with another patient, a suggestion to a friend, as he goes about his day's work; and when that day's work is accomplished, and the hints and requests and suggestions are considered, he will realize that much has been done with comparatively little effort.

There are two essential requisites, however, in the perfection of the doctor's influence and position. First, he must be ever a better doctor. A higher standard of preliminary education must be required, and the resultant product of our medical schools must possess a far higher average of general, as well as medical, education. I would recommend that our Committee on Medical Education consider carefully this matter and place itself in close communication with the similar committees of the American Medical Association and with other State Associations, to the end that the matter may be carefully and earnestly gone into and the proper recommendations eventually made. It must not be forgotten that a doctor of fairly good average education today, is relatively far below the standard which he would have held, with no more education, fifty years ago. The general average of education has increased faster than has the standard in our own profession.

The second essential to proper advancement and political recognition is organization. We must have a well and a harmoniously organized medical profession before these many things can be brought about. We must work for the good of all, sinking local feeling, petty ambitions, personal differences and animosities, and sticking close to the central organization and central purpose. Each and every one of us must jealously guard the honor of our profession and the solidity of our organization. Every eligible physician in every county of the State should be a member of a county society and should work with and for his fellow members. The actual conduct of any enterprise must necessarily fall upon the shoulders of a few in committees or boards. But the work of the individual member in aiding such committees is invaluable. When your committee says to you "Write to So-and-so a request to take action on such a matter," it is only after knowing what the full conditions are and what can best be done by your help. Do what you can, remembering that it is always the weight of influence which counts and that if every member of the Society acts, we shall bring to bear the weight of more than 1,500 of the most influential class of men in the State.

If there is, in your county, a physician whom you know is not a member of your County Society, make it your business to see him or write to him and urge that he immediately apply for membership. Do not wait for the Trustees or the Council to do this work, but do it yourself and do it at once. An inconvenient location should no longer be regarded as an argument against joining the Society, for members now receive the publications and are kept in touch with each other and with the work that is being done. And further, even if a doctor is located in a place so distant and inaccessible that he could not attend the meetings of the Society, he could add to its importance in the community by the weight of his influence when it is needed. No man knoweth the day nor the hour that such influence may be essential to the successful termination of some issue intended for the good of all.

Our JOURNAL has done excellent work in prosecuting this work of organization and I commend to you and to your delegates the importance of continuing it in the policy which it has adopted. To the Trustees of the Council I would earnestly urge the necessity of making every endeavor to even more ener-

getically prosecute the work of organization, and to consider ways and means for working upon the physicians residing in counties where there are County Societies, yet who remain non-members of such organizations. The time is here; the work is ready and waiting; our duty is writ plain for every man to read; let us then be cowards no longer; let us turn to the work and do it; let us take that place in the affairs of State and Nation which it is essential we should take.

(Concluded on page 163.)

ADDRESS IN MEDICINE

AT THE THIRTY-FOURTH ANNUAL MEETING OF THE STATE SOCIETY, 1904.

By R. F. ROONEY, M. D., Auburn.

THE honor of having been chosen to deliver an Address in Medicine before this august assemblage of thinkers is a very great one, and I hope that I may not do discredit to the choice of our very worthy president in calling upon myself to fulfill the duty.

I deeply appreciate this mark of his esteem, but fear that my effort may be disappointing to him, and to the members of this Society. I feel that a man chosen from out the members of the profession in one of our larger cities, where the wealth of clinical material is great, and the field for original work is beyond anything at my command, could have given you something of greater interest than I can offer. All that I will do will be to present some old thoughts, clad in new language, that may arrest your attention, and possibly arouse your interest. This I will promise you, and methinks I can already hear the sigh of relief that will punctuate this statement: I will not bore you with a long address. I will not give you a rehash of medical news, or a review of the progress of medicine during the year that has passed since our last meeting. I will not discourse upon the new wizard-metal, radium, that has overturned the very foundation stone of chemistry—the atomic theory—which has proved that the old philosophers' dream of the possibility of transmutation of metals is after all no dream, but a fact; which has opened up a new field for scientific medical research, and has added another great remedial weapon to our armamentarium. I will give you none of these, but will go back and pluck the sword of Preventive Medicine from the dead hand of the Israelite, Moses, the great law-giver and physician of ancient days. We have no better method for the prevention for the spread of leprosy today than the one laid out by Moses, many thousand years ago. Where can you get a better system of camp sanitation than the one promulgated by the same wise ancient for use by the children of Israel whilst traveling through the wilderness? It is because these ancient camp rules are not observed in our modern military, and other camps, that typhoid fever and other filth diseases prevail today. Let me then review the field of preventive medicine, and if I cannot add a single new thought to those already accumulated, (although I hope to do so), it may serve to remind you of some known but neglected methods for the prevention of disease.

How ennobling is the thought that the physician alone, among all professional men, labors night and day to lessen his own gains. At the expense of his own often too meagerly filled pocket, he is constantly reminding and teaching the layman how to prevent the ailments of himself and his little ones. The physician is the first to fly to the rescue when an epidemic threatens. He stirs and awakens the apathetic

public, and forces it to spend its hoarded dollars for prevention instead of cure.

Since the days of Hippocrates, despite the crudities of medicine then taught, practiced and believed in, the higher duties owed to his profession have been recognized by the medical man. Bacon has said: "I hold every man a debtor to his profession; from the which as men of course do seek to receive countenance and profit, so ought they of duty to endeavor themselves, by way of amends, to be a help and ornament thereto." Some few, from greed of worldly gain, may not live up to this standard, but I believe the number to be exceedingly small. The physician, above all other professional men, lives up to the highest ideals, and I believe the country practitioner leads in unselfish effort. The stress and strife of city life, the selfishness and greed of great communities, the striving for position and prestige, blunt the impulses for good in the city practitioner's heart, and lessen his efforts for the public good and the higher interests of his profession. In every country community the physician is looked up to as belonging to an educated profession that renders him more cultured and refined. His words are listened to with respect, and his professional utterances accorded serious and thoughtful consideration. And further, the country practitioner, from the nature of his calling and environment and his need of self-reliance, becomes a close observer and a ready interpreter of his observations. He learns to reason rapidly, and to act quickly. He becomes intimately acquainted with men and motives, and can sway his community more powerfully than can his city brother. See how utterly impotent were the recent efforts of the best medical men in San Francisco against the selfish commercial interests of the public in that city, when trying to defend the place against plague. How different would it have been had a case developed in a small community. Had the respected physician there pronounced a case as plague, the last dollar in the place would have been pledged to properly quarantine the affected premises and prevent the spread of the disease. Further, the physician, better than any other man (possibly excepting the lawyer), becomes better acquainted with his fellow-citizens, attains a deeper knowledge of human nature, and is thereby better qualified, even outside of his medical education, to understand the requirements of a community; whilst his medical and scientific attainments make him an unequalled adviser on questions of public health and sanitation, water supply, plumbing, draining, sewerage, ventilation, schoolhouse construction, etc. He exerts his knowledge to the benefit of the public, and the honor of his profession; but not to his own pecuniary betterment.

As medical knowledge and scientific attainment have increased, the communal value of the physician, the morale of the profession has improved and its conscience has become more strenuous. The young man starting out on his career inherits from his professional forebears many privileges not accorded the layman, and he also inherits correspondingly great duties. It is this unearned inheritance which places the young physician, in the very springtime of his work, under such deep obligation to his profession. Ever solicitous for its good name, he sinks self and works for the public good; or, ignoring his great debt, works but for himself, and sinks to the level of the money-grubber.

I think I am correct when I make the statement that in our entire country there is not a single law upon any of our statute books, that has ever been passed at the instigation of the medical profession, that is not productive of more good to the masses of the people than to the profession itself.

The physician's whole life is but the history of his

accomplishments and endeavors. He starts out full of ambition, high ideals and roseate dreams, and at the end, when the icy hand of Time has pressed upon his head and turned his locks to snow, his dearest possession is the respect of the members of his own profession. Therefore do I appeal to you all to be the more zealous in the prevention of disease, and thus carry on the good work handed on to us by our professional fathers.

Preventive medicine, like all other branches of our art, is making marked advances and keeps fully in step with modern progress. The war upon mosquitoes and rats, for the better protection of the people against malarial diseases and plague, is of recent origin, but has already proved of inestimable benefit. As yet the mass of the profession has not entered into the earnest efforts that should be made against the mosquito. Those living in a malarial district should constantly urge the necessity of warfare against the pest. Thorough drainage of wet lands is the greatest preventive, as it strikes at the very root of the matter. Next comes protection from the bites of the insects, when they cannot be entirely destroyed. A patient suffering from active malarial infection should be carefully guarded by impervious mosquito netting, lest in this stage he be bitten by the *Anopheles* and thus become a source of infection to all whom the mosquito may subsequently bite. I believe any person suffering from active malarial poisoning should be as jealously guarded as a smallpox patient. He is equally as dangerous to the others around him. Wherever mosquitoes exist, no matter how small their number, great pains should be taken to exclude them from sleeping chambers and, as far as possible, from the whole dwelling. No matter if their numbers are so inconsiderable as to cause little discomfort from their bites; their very presence renders every effort to avoid their sting warrantable. Wherever the *Anopheles* is known to exist, netting around the beds of the sleeping is required.

The common house-fly, *Musca domestica*, has been convicted for the spread of trachoma and typhoid fever, and is under indictment for other crimes. I wish to add my testimony against the suspected criminal for the spread of diphtheria and scarlatina. You all know how eagerly the house-fly attacks the secretions of the mouth and nose in these diseases. It needs the most constant and watchful care of the nurse to keep them from the patient. We know that diphtheria appears in the homes of the rich and poor alike; in the palace and the hovel; where the plumbing and sanitation is perfect, and where neither exist; and where no known means of communication can be traced. I believe that an experience of my own might possibly explain the source of infection as coming through the house-fly. In June, 1903, I was called into the country five miles from town, to see a child four years of age, son of a farmer occupying a home well isolated from all neighbors, and with good sanitary surroundings. I found the patient suffering from a severe attack of diphtheria, of over twenty-four hours' standing. Diphtheria antitoxin was administered, and the next morning was given again. I then began an investigation as to the source of the disease. The father and his household, including three farm servants, had been at home without contact with the outer world for a period of two weeks, and the child and an elder sister, the only children on the farm, had not been off the place for the last six weeks. The father had been busy harvesting several hundred acres of hay, hence the lack of contact with the outside world. No discernible reason could be discovered why the disease should have appeared in the place. The child was completely isolated from the rest of the family, but no screens were put upon the

windows. In one week the sister showed membrane in the throat, but one administration of anti-toxin aborted the disease. Soon afterward I learned that diphtheria had existed for several weeks previously in a large family of children some two or three miles away, on the banks of the same small stream that flowed past the home of my patient. The prevailing winds at that time of the year came directly up the stream from the first infected home, and I have no doubt that flies bearing the specific germs, drifted up the ravine, under the impulse of the winds, and carried the contagium. I also believe that the flies were the cause of the second case, as the child and its nurse were completely isolated from contact with the other members of the family.

The following month I was called in consultation with a physician in a town some miles away, to see two severe cases of diphtheria in the children of a family which had just lost a member from the same cause. I found the house unscreened, and the flies holding high carnival around the sick beds. An adjoining house on one side was unscreened, and cases appeared in it later. On the other side was a well screened dwelling, in which were four small children, none of whom were affected; whilst in the next, an unscreened home, three of the family had the disease. Pardon the relation of this personal experience; I give it in hope that it may lead some of you to give the subject personal investigation. In scarlatina, if the insect does not carry the specific poison, it does carry the secondary or streptococcal infection, and should be as carefully guarded against as in diphtheria. That flies carry the contagium of typhoid fever is now universally granted; but are you all fully awake to the fact, and do you take measures against them accordingly? If not, you should be; and should have your typhoid patients, and all their excretions, carefully guarded against these pests.

This leads me to speak of typhoid and its prevention. Do we live up to the scientific knowledge of our day in this disease? It seems not, for out of every one hundred cases sent to our division hospitals in the Spanish-American war, one-half had escaped the diagnosis by the regimental surgeons. It would seem from this that our American medical schools have been doing some poor work in education. Surely no one will accuse the American mind of being too dull to learn to diagnose correctly. What then is the trouble? I believe it to consist in bowing too much to authority. Instead of following natural methods of study, our medical teachers adhere to the old classical descriptions of typical cases of typhoid, when the fact is that a typical case is the rare exception, and not the rule. Typhoid is taught too much and studied too little, and when the unfortunate student graduates, he is in the position very graphically described by one of our American humorists—"He knows too darned much that ain't so." Drop your dogmatic teaching, gentlemen, and go to Nature. And again, I consider it a disgrace to our eminent bacteriologists in our great universities to have had such outbreaks of typhoid as have characterized their histories during the late past all over our nation. Surely these men, many with reputations outside their universities, should be able to detect the bacillus of Eberth in the water or milk supply, before any case of fever arises, and take measures accordingly.

All physicians should, in a doubtful case of fever, depend upon the microscope, for all other symptoms fail. The serum reaction of Widal is fairly reliable, but unfortunately is seldom demonstrable in the early stages of typhoid; whereas, the presence of bacillus typhosus can be detected from the first in any fairly equipped laboratory. Of course, where the physician is without the proper equipment, and both

he and the patient are pecuniarily unable to procure a bacteriological report, bad results will ensue. I will have something to say for the correction of this state of affairs at the end of this address.

Once the presence of typhoid is demonstrated, in family, village, town or city, the prevention of further infection becomes the bounden duty of the medical man. Let no sense of modesty or hesitation stand in the way; the doctor must throw himself into the breach in the levee, and endeavor to stop the rushing tide.

Another class of our patients are not as well protected against preventible ills as they should be; I allude to the pregnant woman. How often does the physician go to the bedside of the woman in labor without ever seeing her throughout her term of pregnancy? This must happen at times through force of circumstances, but need not happen in thousands of instances where it occurs. Generally the husband of the pregnant woman engages the services of the obstetrician, telling him when his services will be required, and going away with the promise of attendance at the needed time; and that ends the matter, until the specified period has elapsed. If the woman is a primipara, and a stranger, what may the physician find? Nay, what may he *not* find, that it was his duty to know long ago? Nephritis, plevic deformities, tumors, too much adipose tissue, and many other ills that called for attention months previously. Never go to a case of obstetrics in the dark as to conditions, when you know that it is coming. Insist upon a previous examination, and see if there be any constitutional, mechanical, or other reason why your patient should not, or cannot bear children, and whether or no there be conditions of health upon which she needs advice. Instruct her as to the care of her health, and how to detect the first signs of impending kidney affection; the care of her breasts: the proper sterilization of her bedding, and all articles that may be used about her at the time of her confinement; and inform her upon all points that the modern obstetrician knows to be necessary. Never take it for granted that the patient has read some household, or other half-baked work on how the pregnant woman should care for herself, because the woman who follows such advice is in poor hands, and more than likely to go wrong. After her delivery, in every case, advise her as to her diet, the care of her breasts so as to avoid mastitis, sore nipples, etc., and do not leave all to the direction of a careless nurse. In fact, be to her what you should be, her "very great comfort in her time of trouble."

To all your patients be never weary in preaching the necessity of asepsis in all wounds, so as to prevent infection, and septicemia. Teach them, in season and out of season, to avoid the use of patent and proprietary medicines, and other nostrums. Thousands acquire drug habits through the use of those containing opium in some of its many forms, cocaine or chloral; whilst many other thousands die from the use of the many headache remedies now upon the market, all containing dangerous amounts of acetanilid and other coal tar products, not to mention other fatal drugs.

Teach the tuberculous patient what he should know. Impress upon him, or her, the necessity of coughing into a handkerchief that thoroughly covers the face; never to spit into anything excepting a proper sputum receptacle; the thorough disinfection of whatever is soiled by the sputum; to keep the hands and face carefully disinfected; to avoid kissing. Teach all these things for the safety of friends and attendants, besides giving advice for the patient's own good.

And I would ask the profession, as one man, to rise up in condemnation of the railway sleeping coach. Radical changes are needed in these to make them

clean and wholesome. Consumptives are continually *in transitu* between all points in the country, but especially is California full of them. Our climate is an attraction to this class of invalids, and all travelers on our railways are in danger. In the sleeping cars we are shut up in a stuffy berth with cushions and blankets that have borne and covered hundreds of tuberculous people without adequate disinfection. Nothing should be used in these coaches that cannot be readily taken apart and thoroughly cleansed; and all woolen material should be abolished, excepting the blankets, and they should be disinfected after every trip.

In conclusion, I would urge upon the medical men of the State that they unite and advocate to the people at large, and especially to our Legislators, the need of establishing a State laboratory for bacteriological and allied purposes. It is said that the average annual income of the members of the medical profession in the United States is about \$700. The average in this State is probably higher—but none too high. If this be so, how many men in the rank and file of the profession can afford microscopes, and other costly equipments for laboratory work? The graduate is educated for the work by our medical schools, but for want of the necessary means at the outset of his career, cannot equip himself properly and has to do without the costly instruments that he needs. After a time the habit of doing without them if formed, and when the time comes that he is able to procure them, the desire to do so has passed away and he does as he has done before—goes without them. Again, how can the busy country practitioner, exhausted with bodily and mental fatigue, crowded with exacting work, and without assistance, gain time to do bacteriological work? He cannot do it, and so it goes undone. In malarial sections of our State the busy man will each day prescribe for and visit from five to thirty patients, in the latter part of summer, supposedly suffering from malarial disorders of various character. I ask you in all seriousness, can he investigate the true cause of ailment in all of these cases? And yet he is supposed to do so, and gets so accustomed to the symptoms by constant familiarity with them, that he seldom fails in making a correct diagnosis. But he meets a case occasionally that he is doubtful about, but from sheer weariness, or lack of equipment, or, mayhap, ignorance of methods, he fails to call upon the assistance of the microscope, and serious harm results.

Many country practitioners—yes, and city practitioners also—would like to have laboratory work done, when from the poverty of the patient, and his own shortness of funds, the fee of the bacteriologist stands in the way. For these many reasons, I appeal for a State laboratory. The expense to the people of the State would be trivial, and the benefit at times inestimable. We have the honor of having a member of our profession in the gubernatorial chair at the present time, and could depend upon him to aid such a project with all his power. Consider what this would do for the good of the people, first, and the physician, last. The doubtful case is met, a specimen of blood, sputum, secretion, tissues, etc., is secured and sent to the State laboratory, and a report promptly received. Gentlemen, if we had such a department of our State government, thousands of mistakes in diagnosis could be avoided, deaths prevented, and epidemics curbed in their incipency. Examination of water and food supplies would in many instances stop epidemics that now attain dangerous proportions before proper steps can be taken to stop them. Some states of our Union have already adopted the plan of State laboratories, and California should not be in the rear in adopting modern scientific plans for the protection and safeguarding of its citizens.

THE SURGICAL TREATMENT OF CHRONIC DYSENTERY.

ADDRESS IN SURGERY.

By J. HENRY BARBAT, Ph. G., M. D., San Francisco.

Delivered at the Thirty-Fourth Annual Meeting of the
State Society, 1904.

CHRONIC dysentery, up to recently, has been considered as a disease belonging exclusively to the domain of medicine. The results obtained by medical treatment alone have been found absolutely inefficient in 14% of all chronic cases. The reports from the office of the Surgeon General of the Army show that since the advent of the Spanish-American war there have been admitted to the military hospitals, suffering from chronic dysentery, 4,255 men. The diagnosis was made in the majority of cases between the bacillary form and the amebic form, but no accurate record can be obtained; the large majority, however, being of the amebic type. Of the 4,255 chronic cases, 282 were discharged for disability and 253 died, giving a mortality of 6.66%. Of those discharged for disability, the majority go on suffering for months and years, with frequent exacerbations of the disease, until they die from exhaustion, abscess of the liver or one of the other sequelæ of this disease.

Of those who have been discharged cured, after having been in the hospital for several months, all still show amebæ in the stools, and it will probably be only a matter of time when the slightest error in diet will cause an exacerbation of the disease, with all the attendant miseries. This is the history of the disease. We can scarcely consider an individual cured of a disease when it is likely at any moment, without any provocation, to break out afresh, or to result in abscess of the liver at some future time. Harris states that in chronic cases of amebic dysentery perfect recovery is doubtful. When the disease is due to the Shiga bacillus it is more amenable to treatment, but cases will be met with in which the diarrhea will persist in spite of all treatment.

The pathology of the two forms of dysentery varies somewhat, and accounts for the great difference in the number of chronic cases observed in the different varieties. The ulcers in the bacillary form are as a rule more superficial, and do not involve the deeper layers of the bowel; while in the amebic form the submucous coat is almost always attacked, and, even if the ulcers cicatrize, there will be a large amount of contraction follow. In the bacillary dysenteries, the ulcers, while usually confined to the large bowel, may involve the entire intestinal tract; these cases rarely become chronic, but die in the acute stage. In the amebic form we very rarely find the ulcerations extending above the ileo-cecal valve, and in over 100 cases which came to autopsy only one showed ulcers in the ileum, and they did not extend more than a few inches above the valve. In most cases the ulcerated patches are found in the rectum and sigmoid flexure, and in the cecum, very few being found in the intermediate portion of the colon.

The study of the pathology shows the difficulties which have to be surmounted in effecting a cure in this disease. Medicines taken by mouth are avowedly inefficient in curing cases of chronic dysentery, and local applications through the rectum cannot in the vast majority of cases reach all the diseased areas. It is to these cases, which have resisted the best known means of medical treatment, that I desire to call attention, and recommend surgical measures.

The measures advocated are colostomy, right or left inguinal, artificial anus, and exclusion of the large

intestine, partial or complete. These are not new suggestions, as may be found by examining the literature on the subject. In 1902 Labbey collected all the cases reported up to that time, and Nehrkorn gives a complete resume of cases of chronic ulcerative colitis reported up to April, 1903. He gives excerpts from the histories of 34 cases, but in only two of these is any mention made with regard to the microscopic findings. Both of these cases were due to the ameba coli, all the rest of the cases were considered as dysentery on the clinical symptoms, and in a number of the cases by finding ulcerations in the rectum.

Nehrkorn divides the cases into three groups: No. 1, in which the disease begins acutely and at the end of six or eight weeks must be operated on or the patient will die of exhaustion; No. 2, cases in which the disease begins in a mild form and after several weeks sudden acute exacerbations come on which may destroy the patient; No. 3, cases which have become chronic and have acute exacerbations at greater or shorter intervals, the patient being fairly well in the interim. In the 34 cases reported, 5 died shortly after the operation, rather from their exhausted condition than from the operation itself. Nehrkorn, basing his judgment on the reported cases, believes that left inguinal colostomy is the preferable operation (7 successes and 1 failure), right inguinal colostomy giving 6 successes and 3 failures. He does not believe that primary entero-anastomosis is proper, because it does not allow as thorough treatment of the diseased surfaces as colostomy, but he admits that the cure will be much more effective if the large bowel is excluded after all the diseased surfaces are apparently healed.

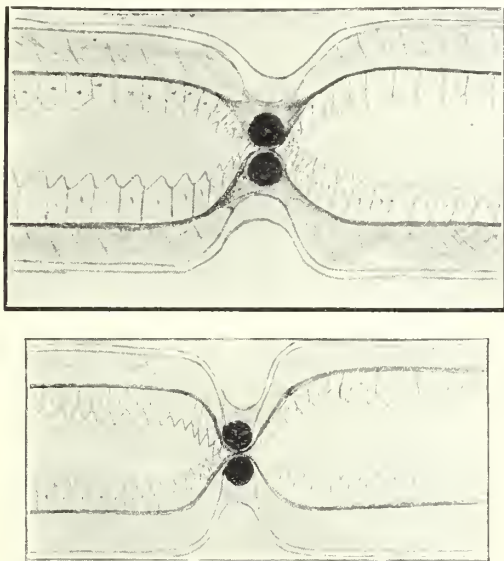
My attention was first called to this subject by seeing a case of chronic amebic dysentery in April, 1900, with Dr. Wm. N. Sullivan, which had been treated for one and a half years without any benefit. I made a right inguinal colostomy, and the immediate result was certainly brilliant. The numerous stools with their accompanying tenesmus ceased instantly, and the patient was able to eat food which had been excluded from his diet for over a year. The colostomy wound was kept open for four months, and then closed by operation, and the patient resumed work shortly after. I have recently learned that some time in 1903 he began to dissipate, and developed an abscess of the liver from which he died, showing that even after four months local treatment through a colostomy wound, we are not sure of having destroyed all the amebæ, and if the bowel is allowed to resume its function, the peristaltic action, coupled with its absorbing capacity, will permit any amebæ which may be present to pass through into the circulation, and cause abscess of the liver.

The second case which came under my care was also a patient of Dr. Sullivan who gave the following history: General health good up to time of enlisting in the U. S. army in April, 1898, at which time he was 21 years old. His health continued good up to September, 1898, when after a short stay in Manila he contracted a violent diarrhea. The stools soon became bloody, and in November of the same year he was in the army hospital at Ermita, P. I., where a diagnosis of dysentery was made, but it is not known whether the bacillus dysenteriae was found or not.

He had relapses in February, May, June and July, 1899, and was finally sent home and mustered out in September, 1899.

After his discharge from the army he placed himself under the care of Dr. Sullivan, and improved considerably; but subsequent violent exacerbations occurred in March and September, 1900, and in April

and May, 1901, the patient never being free from pain even in the interim. While in the Philippines, the bowel movements ranged from 15 to 25 a day, while in America during the attacks from 10 to 15 and in the interim as low as 3 or 4 a day; but during this entire time he suffered from severe pain, especially over the descending colon. The greatest improvement was observed when the patient resorted to rectal injections of solutions of sulpho-carbolate of zinc, cut out all meats, and lived an out-door life;



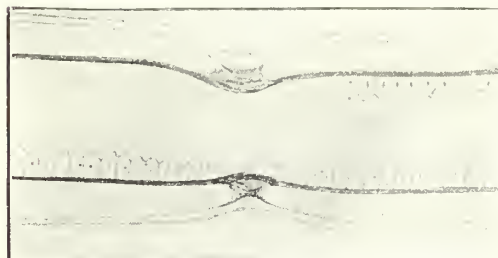
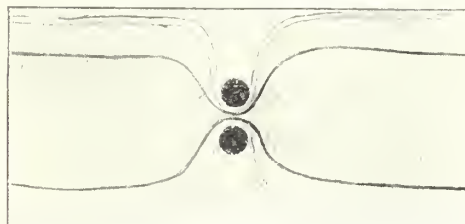
Figs. I and II.—Schematic representations of transit of rubber through intestinal wall. (See Figs. III and IV for continuation.)

but when in May, 1903, he failed to obtain relief from these means, he again consulted Dr. Sullivan, who advised colostomy. The patient entered the hospital on July 26, 1903. His general appearance indicated prolonged suffering, and physical examination showed the body to be much emaciated, heart and lungs normal, but the heart sounds somewhat weak; abdomen flat, palpation showing signs of tenderness over the entire colon, but best marked over the descending portion. The liver and spleen were apparently normal in size. No ulcerations could be detected in the rectum. Examination of the blood by Dr. Ryfkogel gave reds 5,010,000, whites 18,000, hemoglobin 90%. Differential: Neutrophils 78%, lymphocytes 8%, mononuclears 5%, eosinophiles 9 per cent. Clumping reaction with Shiga bacilli positive. The urine showed nothing abnormal except numerous calcium oxalate crystals. Examination of feces showed numerous colonies of bacilli, which could not be morphologically differentiated from the colon bacillus, and eggs of the tricocephalous dispar.

Owing to his exhausted condition it was thought best to use spinal analgesia, and on August 1st the abdomen was opened, the appendix removed and the cecum sutured to the edges of the wound. The bowel was opened on the third day, and the colon flushed out with mild antiseptic solutions, through the colostomy wound. This was repeated daily, varying the program by washing one day through the rectum, and the next through the wound, until the solutions came away clear. An interesting feature occurred on the tenth day, when a live tricocephalous dispar was removed from the colostomy wound. The day

following the opening of the bowel all tenesmus and pain stopped, and the patient began to take nourishment without experiencing the distress which always occurred previously, especially when meats were eaten. Gradual improvement took place for about four weeks, when it was noticed that less discharge was coming from the colostomy wound and more from the rectum, and coincidentally the patient experienced some pain in the left side. This increased for two weeks, and despite the fact that the colostomy wound was enlarged the fecal matter passed by and entered the colon. I then decided to divert the fecal current, and on September 19, 1903, under chloroform, opened the abdomen in the median line and united the ileum, about eight inches from the ileo-cecal valve, to the lower part of the sigmoid flexure, by means of a Murphy button. The intestines were normal in appearance, excepting that the blood vessels were considerably dilated, especially those of the descending colon and the sigmoid. These portions of the bowel felt much thicker than the other portions, but no definite areas of ulceration could be made out, and I therefore concluded that if any had existed they were apparently healed, leaving the mucosa infiltrated, irritable and congested. The colostomy wound was left open in order to observe the effect of the anastomosis. For several days following this operation the patient had severe pain on his left side and back, which required morphine to relieve. I cannot account for this pain in any way except that it resulted from handling the delicate, tender intestine.

The button was passed on the fourteenth day and after that time it was noticed that very little fecal matter was passed through the colostomy wound. By the first of November, 1903, the patient's condition was so good that it was decided to close the colostomy wound, which was done under local anesthesia.



Figs. III and IV.

It was found necessary, after the anastomosis, to use enemata to move the bowels, and the movements were usually formed. Meats, which had been excluded from his diet previous to operation, were resumed without the slightest ill effect, and the patient was able to enjoy his Thanksgiving dinner to the fullest.

When we consider that the formation of abscess of the liver, and the recurrence of dysenteric attacks, is due to the fact that the ameba coli has not been driven from the colon, we can appreciate the necessity of resorting to means which will prevent these terrible sequelæ. The only way to positively get rid of the amebæ is to remove the entire diseased areas of the bowel, before the amebæ have succeeded in passing beyond its limits; but as this is usually impracticable, we must resort to milder measures, even if they are less efficient. The nearest approach to excision of the colon is its complete exclusion. This must not be done unless either one or both ends of the excluded bowel are left open, and sewed into the abdominal wall, because closing both ends of a portion of intestine containing pathogenic materials will produce a rapidly fatal peritonitis.

It has been shown by Kammerer and others that when a portion of bowel has been completely excluded from the fecal circulation its peristalsis ceases, and both absorption and secretion stop after a time; the bowel contracts to a very narrow lumen, and the blood supply diminishes. It can be easily understood then how any inflammatory condition will subside, and necessarily the exciting cause, be it amebic or bacillary, will gradually die out, because we have removed the factors which tend to keep alive these infectious processes. The loss of the large intestine seems to have very little influence on the nutrition of the individual, and usually even the stools lose their liquid character, which they at first assume, and shortly become normal in character.

Next in efficiency to complete exclusion is unilateral exclusion, which is accomplished by uniting the lower part of the ileum to the lower part of the sigmoid flexure or the upper part of the rectum. This may be done by cutting off the ileum about eight inches from the ileo-cecal valve and anastomosing the proximal end into the colon as near the rectum as possible. The distal end is closed by invagination and suture. It may also be done by making a lateral anastomosis between the ileum and colon, crushing the ileum with an angiotribe, between the point of anastomosis and the ileo-cecal valve, tying two catgut ligatures around the crushed part and cutting between, then inverting the cut ends and whipping over with catgut. (Doyen.) The electrothermic angiotribe has been used in similar conditions with perfect success. (Downes.)

In this connection, I made a series of experiments during the past year, with a view of finding a more rapid method of accomplishing this result. Fifteen operations were performed on dogs; in all of them the ileum was united with the lower part of the sig-

the mesentery of the ileum, at a point two inches from the anastomosis, and tied in a single knot over the intestine, completely occluding its lumen. The knot in the rubber was secured by means of a silk ligature in the same manner as advised by McGraw. I had hoped that the gradual contraction would eventually cut the bowel through and close both ends. After the rubber began to cut through the close apposition of the peritoneal surfaces would prevent any infection of the peritoneal cavity, and I expected to find the intestine still in continuity, but with an occluding diaphragm. I am sorry to have to report that my results were not satisfactory. In three cases the rubber cut through too rapidly (inside of 48 hours), and allowed the intestinal contents to infect the abdominal cavity with fatal results.

In five cases the animals died from apparent exhaustion, before the rubber had time to cut through, and in the remaining cases the results were not such as to justify the use of the method. In none of my cases was there complete occlusion. In two there was absolutely no narrowing of the lumen of the gut, and a cross section at the site of the rubber constriction gave exactly the appearance of a circular enterorrhaphy by means of the Murphy button. In the other four cases there was some contraction at the point of constriction, but I believe that even that would have disappeared in time, because the cases which showed no narrowing were five and six months old respectively, while none of the others were over

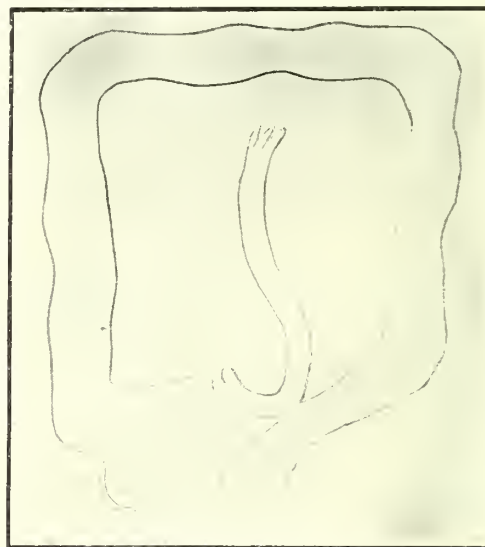


Fig. VI.—Ileo-Colostomy. (Doyen.)

three months. The rubber evidently cut its way through the several coats of the bowel, entered its lumen, and was passed *per vias naturales*.

Examination of the various specimens shows that the pressure of the constricting band forced out the mucosa and muscularis from under it, leaving only the peritoneum and submucosa; and that as the rubber cuts through the peritoneum the cut edges unite over the elastic band. This occurs in a similar manner with the submucosa, keeping up the continuity of the intestine. This peculiar state of affairs prevented any union of the submucosa from taking place within the lumen of the bowel on each side of the rubber, as I had hoped. It took from five days to two weeks for the rubber to cut through, the time evidently depending on the tightness of the rubber band.

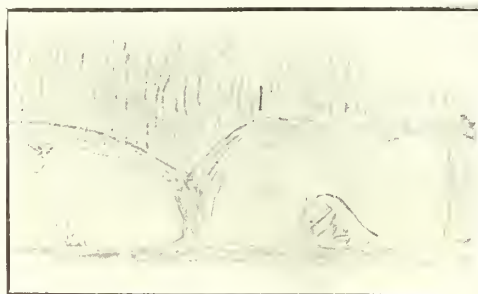


Fig. V.—Drawn from section of ileum six months after using rubber ligature.

moid flexure by means of the Murphy button, making a lateral anastomosis. A piece of rubber cord about two millimeters in diameter was then passed through

I believe that the results which I obtained will account for some phenomenal cases of obstruction of the bowel, which have been reported as having recovered without operation. It would be easy to understand how a constricting band, which was causing obstruction, would cut its way completely through the bowel, in the same manner as the rubber, and have the lumen of the bowel restored after a complete obstruction had existed for some days.



Fig. VII.—Ileo-Colostomy. (Best method.)

In some cases of chronic dysentery the bowel will be found in fairly good condition, and still the patient will have numerous stools with evidence of infection, which has resisted all treatment. In these cases I would advise merely diverting the fecal stream by a lateral ileo-colostomy as in the case reported, but I believe that the best results will be obtained in all cases by making a preliminary colostomy, or, better, drawing a loop of ileum, as near the ileo-cecal valve as possible, into a right inguinal incision and maintaining an artificial anus, with a spur, until all signs of colitis have subsided. If the case has been one of long standing, and there is good reason to suppose that the mucosa of the colon has been destroyed to such an extent that considerable contraction will supervene, we must put that viscus "hors de combat" by one of the means previously mentioned.

Complete rest of the colon can only be obtained by preventing absolutely any fecal matter from passing through it. The ordinary colostomy is not as certain of accomplishing this result as the artificial anus with spur, which keeps all fecal matter from entering the cecum, and enables us to wash out the entire colon as often as we see fit.

Weir's suggestion of using the appendix, which has been fixed in the abdominal wall and the end cut off, in order to wash out the colon, cannot be advocated as equaling an artificial anus, because we will find in most of the cases of chronic dysentery that the appendix has taken part in the disease process, and its lumen has become almost obliterated. In the two patients on whom I operated, I removed the appendices, and it would have been impossible in either of them to have made use of that organ, on account of the extreme narrowness of the lumen.

Furthermore, this method still allows the fecal matter to pass over the diseased surfaces, and is

therefore not to be commended. Primary ileo-colostomy, while it places the colon immediately at rest, does not enable us to treat the diseased parts by direct medication, and it cannot be commended. Complete exclusion, by cutting off the ileum about eight inches from the ileo-cecal valve, and the sigmoid at its junction with the rectum, and uniting the proximal end of the ileum to the upper part of the rectum, then sewing both the other cut ends into the abdominal wall, is an operation which can rarely be performed as a primary measure, on account of the time necessary and the exhausted condition of the patient.

We are therefore narrowed down to colostomy, or artificial anus, as a primary operation, to be followed by one of the others after the patient has sufficiently improved, if the occasion demand. The operation is one of great simplicity, and may be performed in a few minutes under local anesthesia, by making an incision about two inches long over McBurney's point, pulling up the ileum near its junction with the colon, drawing out enough of it so as to be able to pass a sterile rubber catheter of large size through the mesentery, to prevent the possibility of the gut falling back into the abdomen, and to produce a spur. Gauze is packed snugly around the intestine to prevent hernia of other loops, and the operation is completed. It is necessary when the operation has been done in this manner to loosen the bandages and adjust the packing around the loop of gut at least three times in 24 hours in order to allow the gases to pass through the loop. The bowel should be opened on the third day by a transverse incision, cutting through at least three quarters of its lumen. This gives us two openings, one to wash through, the other for the extrusion of the feces.

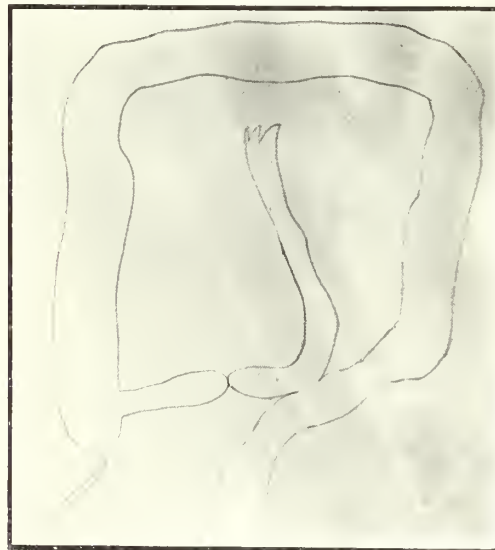


Fig. VIII.—Ileo-Colostomy as done with experimental rubber ligature.

The length of time which these artificial openings are to be kept open cannot be definitely stated; in most of the cases reported the colostomy wounds were not closed for three to twelve months. Judging from the results, I would advise exclusion of the colon in all cases of amebic dysentery which had lasted for more than one year under treatment; the physical condition of the patient determining whether an artificial anus shall be made first, or whether the exclusion shall be the primary operation.

While the surgical measures advocated are not in

themselves curative, they afford us a means of bringing our medicines in contact with the diseased surfaces, and most important of all, they permit us to keep the inflammatory areas at rest, and this will be admitted by the strongest opponent of surgery as being one of the greatest desiderata in any inflammatory condition.

CONCLUSIONS.

A large number of patients with chronic dysentery do not get well under medical treatment alone.

The cases are principally of the amebic type, with prospects of exacerbations, abscess of the liver, contraction of the bowel, and marasmus.

These complications may be obviated in many cases by a timely operation.

The operative procedures are not in themselves particularly dangerous.

The relief afforded is immediate, and will result in cure in many instances.

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TUBERCULOSIS OF MAMMARY GLAND.*

By MYRTLE AP LYNN, M. D., Napa.

THE subject of this paper, as you know, is tuberculosis of the mammary gland. In selecting this topic for my theme I have not hoped to be able to impart any information on the subject to the society, much less contribute anything new. My motive in so choosing has been somewhat selfish, viz.: to elicit from the discussion that information which I have been unable to obtain from any other source. Yet I do make this one claim of excellence for this paper. It is short.

There does not seem to be much written on the symptoms, diagnosis, etc., of this disease; if so, I have been unable to find it. It is probably true that many of the cases that have been diagnosed carcinoma of the breast, have in reality been tubercular mastitis, just as before the microscope revealed its true nature, lupus was mistaken for rodent ulcer or epithelioma.

Tuberculosis of the breast may occur at any time after puberty; no cases before puberty have been recorded. With regard to infection, it is said to be more or less direct, usually through the milk ducts and often seems to follow lactation remotely. It is frequently bilateral.

The symptoms are such as follow consolidation of the gland, viz.: weight resulting from tissue formation and sensitiveness with spasmodic pain out of all proportion to the growth; this is said to be peculiar to the disease. The disease starts in one lobule and spreads to others, so that several hard, firm nodules result; these nodules move only with the gland. Lymphatics may or may not be involved, according to the stage of advancement. The skin becomes reddish and mottled and early becomes attached to the nodules, which shows serious and deep-seated trouble.

The tubercle bacillus cannot always be found in a section of a nodule or in the pus alone, but an examination of the two together will almost always show bacilli. Microscopical examination shows the usual tubercle formation with caseous degeneration, and in sections where the bacillus itself is absent, the presence of giant cells is almost diagnostic.

There has been some discussion as to whether or no cachexia is caused by this disease when in a purely uncomplicated form; many authorities claiming that cachexia is always due to mixed infection and never to the tubercle bacillus alone, while others still hold the view that there is a true tubercular cachexia. It has been quite well established, however, that this group of symptoms is always due to a mixed infection. The diagnosis is made by the general condition and history of the patient, the distinct, hard, smooth, firm nodules, the immobility of the growth, the attachment of the skin, and the extreme spasmodic pain: the microscope, of course, deciding the diagnosis if the tubercle bacillus be found.

De Costa speaks of a chronic abscess of the breast which is tubercular, as a lump which slowly enlarges and finally ruptures, forming sinuses. The axillary glands are apt to be involved. The patient gives a tubercular history, with history, as a rule, of previous tubercular trouble of various sorts, and has usually borne children. Chronic abscess of the breast causes little or no pain. It may be treated as any cold abscess elsewhere; if small, open it with aseptic care, rub its walls with gauze to remove tubercular masses, irrigate with bichloride solution 1:1000, pack with iodoform gauze and dress antiseptically. It is wise to remove the entire gland and clear out axilla in order to prevent recurrence and dissemination. There was a case of tuberculosis of the breast in an inmate of our Hospital recently,

* Read before the Napa County Medical Society.

which presented some interesting features. The history of the case is as follows:

The patient, Mrs. M., had been apparently well physically, although very insane and violent, until she was vaccinated, which was done the latter part of March, during our late quarantine for smallpox. Nothing was known of the patient's family history.

I did not see her until several weeks after she had been vaccinated as I was not going into the wards, being in charge of the contagious cottage at that time, but the attendant told me afterwards that the arm was very much inflamed and the glands under the arm enlarged. There was nothing surprising in this, however, but soon the attendant noticed what she described as the "vaccination spreading to the breast" and, thinking that there was something wrong, called my attention to it. When I first examined it, the entire breast was considerably swollen and inflamed and presented all the indications of a rapidly developing growth with hard, nodular masses.

The patient was operated upon June 10th by Superintendent Stone. Halstead's operation for amputation of the breast was performed with very thorough extirpation of diseased tissue, and the axilla cleaned out as the lymphatic glands were extensively involved. Rapid recovery followed the operation. The wound healed by first intention, except for about a couple of inches of the incision which gaped on account of the giving way of the stitches. There was considerable tension, and the patient being very violent, managed to work the bandages loose enough to get some motion of the arm the day following the operation. This space, however, rapidly filled in with granulations; the healing was complete and the scar looked healthy.

Later, however, the patient's general health failed rapidly; she developed a cough, became greatly emaciated and died October 13th of general tuberculosis, four months after the operation.

This case had been considered carcinoma by all the assistant physicians, and no question had been raised until Dr. Stone expressed the belief that it might be tubercular and advised a microscopical examination. This proved to be the case, as the microscope showed abundant tubercle bacilli. Two microscopical examinations of the nodules were made, both showing tubercle bacilli, and a short time before the death of the patient an examination of the sputum also revealed the germs in great numbers. The question of the mode of infection in this case is interesting, as suggesting the possibility, or rather probability, of direct inoculation with tubercle bacilli from vaccine lymph. The site of vaccination was at a point where numerous lymphatic vessels drain into the axillary glands which, in turn, are joined by the mammary lymphatics.

Another case which came under my observation, though rather indirectly, as I had little opportunity to study the case, was that of a lady living in San Bernardino who had come to Southern California for her health several years ago. Her family history was markedly tubercular; all her brothers and sisters having died of consumption. She was in very poor health and was probably tubercular at the time she came to California, but had recovered her health to such an extent that she considered herself

out of danger from consumption, although she was never very strong and was often ailing, but was in good flesh and to a casual observer appeared well. She had a severe attack of the grip one year ago last winter and some time afterward several hard nodules formed in the breasts, the disease being bilateral. Both glands were about equally affected. She complained of severe sharp pains at times; was very nervous and complained of general malaise. At the time I saw her she was still in good flesh but looked ill and seemed much depressed. The growths were not extensive; there was no adherence of the skin to the nodules and no discoloration. She told me that her physician feared it might be cancer and advised operation which she was seriously considering, but desired to build up and become stronger before undergoing the operation. I did not see her again. Not long afterward she became worse and died of acute miliary tuberculosis. No microscopical examination was made in this case, but it seems evident that the local disease was a part of a general tubercular condition.

In the treatment of tuberculosis of the mammary gland, the question of amputation is of the most vital importance. Complete extirpation of the breast and cleaning out of the axilla should be done in all cases where the patient will permit.

Every attempt to improve the general health and to increase the resisting power of the patient just as in manifestations of tuberculosis elsewhere should be made. The patient should be kept out of doors from early in the morning till four or five o'clock every afternoon, avoiding cold winds and moisture, overheating, etc. Give plenty of nourishing food, as much as the stomach can digest—olive oil, cream, milk, butter and eggs. Plenty of raw eggs given in lemonade to prevent torpidity of the liver, has been highly recommended, and it is said that patients may become accustomed to taking as high as six or eight eggs daily with benefit. The subject of serum and antitoxin treatment is always interesting and alluring, but unfortunately is not, as yet, very encouraging.

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KILLIAN'S RADICAL OPERATION FOR CHRONIC FRONTAL SINUSITIS, WITH DEMONSTRATION OF CASE.*

By A. BARKAN, M. D., San Francisco.

DURING my recent visit in Germany I spent some weeks in Freiburg at Professor Killian's Clinic, where I witnessed Killian's direct method of bronchoscopy carried out by introduction of long tubes through the natural breathing channels into bronchi of the second and third order. The instruments which I brought for the use of the Cooper Medical College are open to inspection and may be utilized by any one of this Society.

Before proceeding with the history of this case, permit me to give a short resume of Professor Killian's method of radical operation for chronic frontal sinusitis. Two publications have appeared on this topic, one from the pen of Dr. Krauss, former assistant in Professor Killian's clinic in Frieburg, the other from the pen of the author of this method himself. Both have appeared in the 13th volume of *Archives of Laryngology and Rhinology*, edited by Professor Frankel, with excellent illustrations of the operative methods. From the beginning it was Professor Killian's endeavor to improve the methods for the cure of chronic frontal sinusitis to such an extent that they could not only lead to a certain cure, but would give the best possible cosmetic result. Of the twelve cases, most interestingly and carefully described by Dr. Krauss, the first one was operated on in '96. Killian had then recognized that only by absolutely sacrificing the anterior as well as the lower wall of the frontal sinus,

ethmoid which are nearly always affected, were rendered accessible. Killian's method, then, calls above all for a perfect resection of the anterior frontal wall. The lower wall of the sinus frontalis, that is the orbital plate of the frontal bone, is also completely sacrificed in all patients. The orbital contents thus take their share in filling up the empty spaces of the sinus and an excellent view may be had of even the most complicated septa and recesses in that region.

The most important part of the method, however, consists in saving the upper edge of the orbit in the shape of a bony margin or crest. This is cosmetically of the greatest importance. By being careful not to remove the periosteum further than the insertion of the tendinous fibers of the trochlear ring, double images can nearly always be avoided.

As it is absolutely necessary in every operation for chronic abscess of the frontal sinus to make a good opening into the frontal cells which are always diseased, a resection of the frontal process of the superior maxillary bone becomes a part of the method. This opens up all the cells of the ethmoid which are nearly always affected; the sphenoid sinus may be reached along this channel. The anterior end of the middle turbinated bone is plainly exposed and can be readily removed and a large communication between the frontal sinus and the nose is established. The nasal mucous membrane must be saved and is utilized in forming a flap to cover the defect. The wound is sutured either immediately or a few days afterwards.

Mr. W. E. S. presented himself at my office. Pus was oozing from the region of the glabella down to the root of the nose. Ten years previously he had noticed catarrhal symptoms. There had been profuse discharge from the nostrils and into the throat, whether in the upright position or lying down. After five years' suffering the amount of discharge was much increased. It was thick, milky and ill-smelling. At times there was severe pain in the forehead. He consulted a doctor in Eureka, who bored a hole into each frontal sinus through the vertical plate of the frontal bone a little to one side of the median line, and about three-quarters of an inch above the eyebrows. Silver tubes were inserted and constantly worn. They were open to the air. For a while all went well, though there was a copious discharge which he kept in abeyance by constant syringing. One year ago the right opening became narrow. The tube could not be put in and it gradually closed. The left side was successfully syringed all the time. Two weeks previous to presenting himself, dull aching set in on the right side, swelling became noticeable at the point of closure, and much pain was experienced for three days. Then perforation ensued, and the fistulous opening re-established itself. Since then the patient has been temporarily relieved, but wished to be definitely cured. The patient was found to be from healthy stock, 35 years of age. On the right side was a red, boggy looking, elevated ridge extending from a point 2 cm. above the nasal process of the frontal bone, upward $1\frac{1}{2}$ cm. At its upper end is a fistulous opening from which foul smelling pus exudes copiously. Exuberant granulation tissue surrounds the opening, which is ragged, having been caused by a spontaneous rupture. Corresponding to this fistulous opening there is one on the left side above the superciliary ridge 2 cm. above the nasal process of the frontal bone 2 mm. in diameter. In it thick pus is seen pulsating. No particular swelling or inflammatory condition around this opening. The nasal mucous membrane is hyperannic. On the right side a spur on the cartilaginous septum touches slightly the lower turbinate. The left side is spacious. Under the middle turbinate on both sides creamy pus is noticeable which pulsates on the right side. The pharynx is normal but coated with a layer of pus. The patient has several bad teeth in the upper jaw. On the right side the posterior bicuspid, on the left side both bicuspids and three molars are bad. The naso-pharynx is comparatively free though the left tube protrudes somewhat. There is some creamy pus seen on the right side, at the base of the vomer. Transillumination revealed the right antrum entirely opaque; left side showed a slight tinge of brightness. Both frontal sinuses transilluminated slightly, there being a light area at the point of their artificial openings. The probe passed through the right fistula directly backward 5 cm., where it encountered a very sensitive bony resistance. It passed through the left fistula $4\frac{1}{2}$ cm. until it encountered the same resistance. It passed in a downward direction about 3 cm. The probe can be passed directly backward only, with little lateral leeway. From the nose the probe passed into both frontal sinuses. A catheter could be introduced into the frontal sinus on the right side and solutions injected through the

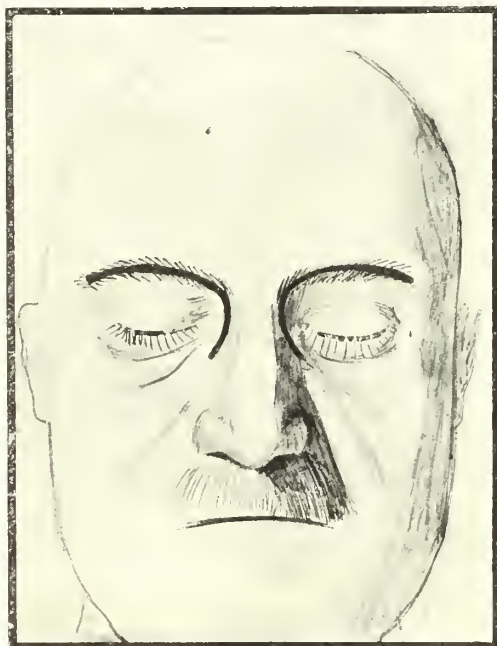


Fig. 1.—Heavy lines indicate incision.

could a certain cure be expected. "Only such a radical proceeding," he says, "is in unison with the principles of modern surgery with regard to the treatment of abscesses in rigid walled cavities." To change a complicated cavity into a flat surface it was necessary to completely obliterate the rigid walled frontal sinus and by making a resection of the process frontalis of the upper maxilla, the cells of the

* Read before the San Francisco County Medical Society.

same passed out both external openings and also back into the nose. The condition of the ears is normal.

On October 2nd, the anterior end of the left middle turbinate bone was amputated and this allowed freer catheterization on that side. October 7th, the anterior end of the right turbinate was amputated. The discharge had freer outlet but continued nearly as profuse. No pus was elicited on syringing the maxillary antra through the natural openings, nor when exploratory puncture was resorted to.

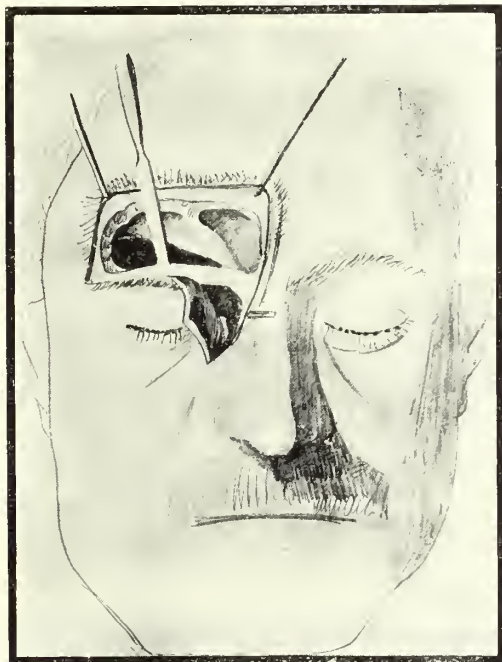


Fig. 11.—Showing method of opening sinus on right side and bony bridge.

October 17th, patient entered the Lane Hospital. On the morning of the operation catheters were passed into both frontal sinuses and these were flushed out with borie acid solution. One-eighth of a grain of morphine was injected. Ether narcosis. Post nasal plug was applied under anesthetic and the whole rear part of the nose, and especially the middle meatus, were well tamponed. Anesthetic was now changed to chloroform. The eyebrows were not shaved. The right side was first proceeded with. Incision was made from the external angular process of the frontal bone on the right side through the center of the eyebrow, to its inner end and then carried in a graceful curve, downwards on the frontal process of the superior maxillary bone as far as the lower level of the lower end of the nasal bone. This incision went to the periosteum only. Considerable bleeding was checked with haemostats. The upper limit of the bony ridge was now determined by a cut through the periosteum parallel with the orbital ridge and at a distance of 4 or 5 mm. above it. This cut was carefully made, following closely the orbital margin with the finger. At the inner end this cut was to join with a similar cut on the other side at the base of the nose a few mm. above the upper end of the nasal bone. The periosteum was now elevated and with the overlying integument was drawn upward. The tissue of the brow was loose enough so that the whole sinus on one side could be exposed through this wound. The upper limit of the bridge was then outlined with the chisel and the sinus was entered through the fistulous opening. It was found filled with granulation tissue and pus. A probe was inserted through this first opening to get the dimensions of the sinus to determine how far the periosteum should be reflected, and the limits of safety. The opening was enlarged with chisel and forceps, separating it very carefully from the bony bridge. The sinus was laid bare in its entire extent. The upper and outer angles were smoothed down with chisel and electric bur so that the integument lay flush against the posterior wall. Many small septa separating masses of pus had to be removed, and an enormous mass of stinking material was curetted out. The anterior wall of the sinus was then entirely removed. We now entered upon the second stage of our operation by carrying the original incision so far as it related to its downward curve, through the periosteum overlying the frontal process of the superior maxillary bone, up to near the insertion of the trochlea. The frontal process of the superior maxillary bone was now chiseled

through very carefully. When an opening a few mm. in diameter was made the nasal mucous membrane was carefully pushed aside and the opening enlarged downward as far as the end of the nasal bone, by means principally of a cutting punch and chisel. The whole frontal process of the superior maxillary bone was thus removed. The nasal bone remained intact. The nasal mucous membrane, now lying as a floor to this quadrilateral window, was turned into a good-sized flap by separating it above and posteriorly. The flap was then drawn inward out of the way. Though the bleeding at this stage was considerable, it did not interfere with the continuance of the operation. A curet was now pushed downward through the ostium frontale into the nose and with this as a guide a wide communication was made with the frontal sinus. We now proceeded with the removal of the orbital roof as far as it formed a floor of the sinus. The upper lid, the orbital tissue and the periosteum lining the orbit were pulled downward and outward, good care being taken not to interfere with the pulley of the trochlea and to protect the orbital contents. With chisel and forceps the bony floor of the sinus, which was somewhat discolored and rather thin, was completely removed. The supra-orbital crest, covered by its periosteum, now stood out in good relief as a bony bridge connecting the root of the nose with the external angle of the frontal bone. A vast communication was thus established between the frontal sinus and the nose, the anterior ethmoidal cells, containing pus, being removed. The posterior cells, filled with pus, were freely curetted, until firm bony resistance indicated the posterior wall of the sphenoidal sinus. The operation was completed by holding the membranous flap outwards, by the introduction upward through the nose and into the frontal sinus, of a rubber tube of large calibre. After cleaning the wound, it was closed with interrupted celluloid sutures. The outer angle for the distance of 2 mm. was left unclosed and a strip of iodoform gauze inserted.

October 18th—At 8 P. M.: Temperature 99.8°, pulse 100. $\frac{1}{8}$ grain of morphine and 1-30 of strychnia; October 19th—6 P. M., temperature 99.8°, pulse 100; October 20th, temperature 100°, pulse 76; October 21st, temperature 99°, pulse 88; dressing removed and strip of iodoform drainage changed; October 22nd, temperature 99.9°, pulse 76; considerable purulent discharge from the tube; dressing again changed; iodoform gauze saturated with purulent material.

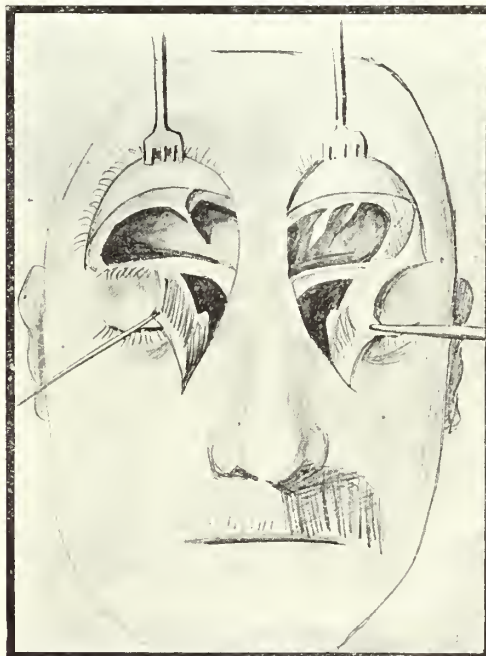


Fig. 11L.—Showing method of opening sinus on both sides.

October 23rd.—patient was now prepared for operation on the left eye. The counterpart of the operation on the right side was performed. The bone covering the frontal sinus anteriorly was chiseled away up to the point reached on the right side. The operation consumed much less time than the preceding and the wound was closed as before with celluloid sutures.

October 24th.—Returned to ward after operation; pulse 122, fairly strong; $\frac{1}{4}$ grain of morphine, strychnia 1-30; whiskey $\frac{1}{2}$ dram; vomited small amount of blood; October 25th, after fairly comfortable night, vomited small

amount of bloody mucus; temperature 98.4°; October 26th, temperature 98.0°; pulse 100; patient's stomach would not retain food; peptonised milk per rectum; passed fairly comfortable night; wounds dressed; removed iodoform from both sides, saturated with pus; replaced them by shorter strips; the edema which had been present in the right lid following operation now disappeared; no diplopia; two drops of atropin in each eye; patient expectorates large amount of mucus pus; October 27th, temperature 98.4°; pulse 100; edema of left lid still present; stitches removed from right side; wound perfectly healed, except where iodoform drains enter sinus; October 28th, temperature 98°; pulse 92; taking food by mouth and feeling fairly comfortable; October 29th, temperature 98.4°; pulse 80; dressing removed; several stitch-hole abscesses, which did not occur at all in the right side, are present; October 30th, temperature normal; takes nourishment well; dressing done; edema of lid nearly gone; stitches removed; October 31st, slept well and ate well;

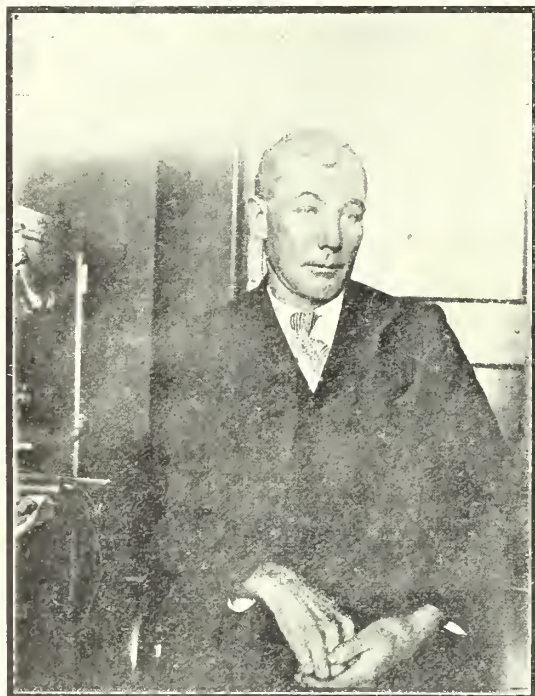


Fig. IV.—Patient after operation.

stitch-hole abscesses healed; November 1st, patient up and dressed; temperature normal; November 22nd, tubes and gauze removed and wound closed where gauze drain had prevented union.

November 6th.—Patient left hospital. Large opening from nose into either sinus. Pus present in small amount, and growing daily less. November 10th.—Patient has become practically well. All wounds are closed. There is some discharge but not such an amount as to cause him inconvenience. Is growing daily less.

The patient before you presents then at this date about three and one-half months after operative work has been done, following condition. Subjectively he is relieved after 10 years' constant suffering from pain and from the very embarrassing profuse, ill-smelling discharge. His health has returned. For about two months past he has been at work in the open air, attending to gardens, etc. The discharge from his nose is very slight, yet in no way embarrassing, with the likelihood, as borne out by Professor Killian's case, of becoming normal in due time. Objectively, examination reveals slight disfigurement by the falling in of the skin on the left side, practically none on the right side. But for the unavoidable presence of two large scars caused by the artificial fistulous openings made five years ago over each frontal sinus, the disfigurement would be very slight indeed. As it has been borne out by a subsequent discussion, the general verdict is that, considering the excessively large sinus and the radical features of the operation, the cosmetic result as far as the forehead is concerned, is a good one. Even at this early date there is hardly any trace visible of that part of the scar which lies through the eyebrows on either side, and but a faint line, not a disfiguring one, at that of the incision over the frontal process of the superior maxilla. This bears out in our case to a very remarkable degree, Professor Killian's thoughtful location of the cut not only directly over those parts which give direct access to the

affected sinus, but shaping the curve so that it follows in physiognomic harmony with the other lines of the skin in that region of the face. There is no trace visible of the large defect made by the resection of the frontal process of the superior maxilla. Practically there has been no diplopia at any time. No iritis, no lesion of the orbit and its contents of any kind. We feel satisfied that with due care and minutely following out Professor Killian's directions in this regard, the trochlea can be saved and the annoying symptom of diplopia prevented. Transillumination at this date shows a fair condition of the maxillary sinus, no transillumination as a matter of course in the region of the frontal sinus. The region of the forehead has regained sensitiveness. The sense of smell, formerly severely impaired, has much improved, and with a subsequent slight paraffin injection we hope to make the cosmetic result a better one still. The value of the bony bridge in lessening the deformity, easily saved, easily formed, and as it seems, easily nourished, cannot be overrated. It is at no time in the way of other operative procedures. The removal of the frontal process of the superior maxilla, to our minds, is the most important radical improvement made by the author of this method. For the ease with which one, after having formed a flap of the nasal mucous membrane, can get a view of the middle turbinate bone, and reset it, the directness and ease with which one can deliver the ethmoidal cells in their whole extent, leading up in a natural and safe way to the cleaning out of the sphenoidal sinus. The possibility of overlooking and opening every affected cell so often hidden away in the roof of the orbit in the depth of the ethmoidal bone, makes this part of the operation a most valuable addition to the operative methods of Kuhnt and of Ogstonluc, which each of them has equal advantages as they have defects, a feature very well brought out by Lermoyez in the discussion on frontal sinus and maxillary antrum operations held before the Section of Laryngology at the Manchester meeting of the British Medical Association in 1902. The operation, if one has prepared himself well on specimens and the cadaver, is one of comparative ease. Work should proceed slowly with good illumination and with the end in view to explore very carefully the cells of the affected sinus, always having in view the clinical fact that in the very chronic cases of this kind the condition of pan-sinusitis is likely to be present. Killian's method is both radical and conservative to an imminent extent.

DISCUSSION.

Dr. K. Pischel.—I wish to congratulate Dr. Barkan on his excellent result. In several cases in which I operated, I had not such good cosmetic results. Professor Killian says that the discharge from the nose lasts only two or three months. In the last few cases it did not last so long because that canal which leads down from the frontal canal is covered with mucous membrane. The lower part should be covered with skin flaps just as we use them in the chronic otorrhoea where we cover the bone with skin flaps. Perhaps it will be possible to make a bone skin flap upwards and downwards after cleaning out the sinus. Cover the surface with skin. It has to be tried and might work. That would of course cause a much better surface and prevent falling in of the skin.

Dr. J. Denis Arnold.—I think that Dr. Barkan is to be congratulated in that he found a case so well adapted for this operation. I do not believe that either Killian or Barkan would recommend so extensive an operation for all cases of sinusitis of the frontal bone. Where there is necrosis, modern surgery suggests that all the bone be removed, and in complicated cases where all this is affected, the operation is well adapted. So far as cosmetic results are concerned, Dr. Barkan had had features to deal with and his success is rather marked. Why originally this patient was so operated on as to leave two external sinuses, is hard to imagine. The first operation must have failed and catheters were then introduced. In all cases in which the lower floor is much involved it seems to me this operation is better than any other less radical operation.

Dr. Cohn.—The result in this case is especially gratifying, as Killian says in another publication, aided by Keimen in Berlin in 1900, that he would not undertake an operation in cases in which the cavities are large. In this case the size was appalling. Killian himself might have hesitated. Killian was not the first to remove both the anterior and inferior walls of the frontal sinus. Redel was the first who saw the necessity of removing both of these walls. Killian modified it by leaving a bony bridge. That is the essential feature of his operation. I agree that for radical cases this operation surpasses any other. It leaves good cosmetic results.

Dr. Nagel.—I should like to ask whether a bacteriological examination has been made. Of late years affections of sinuses become of great interest to the ophthalmologist. In some cases it is not known why the orbit and its contents are affected by affections of the lateral sinus. Bacteriological examinations are of great interest.

Dr. Gross.—The cosmetic result is very good indeed, considering the difficulties with which Dr. Barkan had to deal, and I might suggest that an injection of paraffin would do away with the remaining deformity.

REPORT OF THE THIRTY-FOURTH ANNUAL MEETING

OF THE

MEDICAL SOCIETY OF THE STATE OF CALIFORNIA

HOTEL EL PASO DE ROBLES, APRIL 19, 20, 21, 1904.

(Reported by Philip Mills Jones, M. D.)

Morning Session, April 19, 1904.

The meeting was called to order by Vice-President Dr. W. H. Flint, Santa Barbara, and the Society then was welcomed to Paso Robles by the chairman of the Committee on Arrangements, Dr. McLennon. This was followed by the annual address of the president, Dr. Ellis, which is published on page 141.

The Address on Medicine, by Dr. R. F. Rooney, and Address on Surgery, by Dr. J. Henry Barbat, will be found on pages following the president's address.

The following telegram was read:

Vancouver, B. C. April 19, 1904.—To Doctor H. Bert Ellis, President State Medical Society, Paso Robles, Cal.: Hearty greetings to your Society. Best wishes for profitable and pleasant meeting. Kindly convey cordial invitation to your members to be present at meeting of Canadian Medical Association, to be held in Vancouver, August 23 to 26. SIMON J. TUNSTALL, President.

The report of the Memorial Committee, Dr. J. Lambert Asay, chairman, was then read.

MEDICAL EDUCATION AND LEGISLATION.

Afternoon Session.

Dr. H. S. Orme, Los Angeles, chairman, reported for the Committee on Medical Education and Legislation, a synopsis of the report being:

Improvement in medical education in California greater in last twenty-five years than could have been expected. Steps in progress noted. Its present standard satisfactory. The need today is higher preliminary education. Nominal requirements too much relaxed. Proper remedy is to put the matter in the hands of the Board of Medical Examiners instead of the schools, and apply the test before matriculation. This defect is the cause of the inferior standing of the medical, in comparison with the legal and clerical professions. Reciprocity between the States in medical requirements can be brought about by concerted action of State Medical Boards at annual meetings of American Association. Legislation recommended, as asked for by the State Board of Health. Repeal of act creating office of Attorney to State and San Francisco Boards of Health.

Dr. Carl R. Krone, Oakland, in discussion, said that in preliminary education what we need is not a higher average of education in the classes, but rather the more general attainment of a perhaps lower scientific average of the masses. As to better safeguards against the abuse of poisonous drugs, it seems to me that the unlawful possession of the same and the evidences of unlawful use are, or should be, punishable. Evidence could then be more easily adduced, and penalties more readily enforced. When murder is committed with a gun, nobody thinks of accusing the maker or the seller of the weapon, but the one who abuses the same is punished.

Dr. T. C. Edwards, Salinas, said that all efforts toward raising standards of medical education are good. Examinations for license to practice should not include examinations in fundamental or preliminary branches. Examinations should be confined to practical branches and later work. Legislation ought to be easy if we go at the work right. The average country person looks with suspicion upon all proposed legislation. We must make the public see these things right and then they will support us.

Dr. LeMoyne Wills, Los Angeles, said that we have a hard time to convince the dear public of anything,

and cited his experience at Sacramento working for our Medical Practice law.

Dr. Orme said that he had listened with interest to Dr. Krone's suggestion to examine at the end of second year, and this would keep out those not having preliminary education.

Dr. W. S. Thorne, San Francisco, read a paper entitled, "Some Reflections on State Examining Boards," an outline of which is:

All progress is in face of opposition. Medicine no exception. Medicine now occupying important place in all states of life. Importance of examining boards. Their personnel. The preliminary education of applicants. Their examination. The illegal practitioner: his eradication. The definition of the "Practice of Medicine." Report of Board's work for past year.

At this time, Dr. Elizabeth Follansbee, Los Angeles, announced that Dr. Charlotte Blake Brown, the first woman doctor recognized by the State Society, had been operated upon for intestinal obstruction. Dr. Follansbee had wired to ascertain the condition of Dr. Brown and had learned that a second operation was in progress, the result almost hopeless. The president was instructed to wire sympathy from the Society to the family.

Dr. Dudley Tait, San Francisco, opened the discussion on Dr. Thorne's paper, confining himself to certain points regarding the practical application of the law and the legal complications which surrounded the efforts of the Board in prosecutions. Work in San Francisco has resulted in perfecting the machinery of prosecuting illegal practitioners. County Society should be the prosecuting agent. All provisions of the Medical Act should be strictly enforced. Our law has been pronounced by the American Academy of Medicine to be almost perfectly drawn; it goes back to preliminary requirements and does not deal only with examination. Applicants have recently imposed upon the Board. Two schools graduated men who had been there only one or two years, but through a mistake of the secretary were accepted for examination; this was a violation of their affidavit. The only discrimination was unanimously agreed to, and has been only toward some old practitioners. Candidates are never rejected for failure to pass in one subject. Apathy of the profession is very dangerous; the Society should show its approval of the work of the Board.

Dr. Thorne, in closing the discussion, said that the keynote was struck by Dr. Tait when he said the stream could not be purged at its mouth, but only at its source, and our law permits us to go to the source and consider the education of the candidate, and his qualifications.

EYE, EAR, NOSE AND THROAT SECTION.

"Concerning the Varieties and Etiology of Glaucoma," by Dr. Benj. F. Church, Los Angeles, was the first paper in this section, a condensed abstract being:

All conditions of the eye in which there is an increased intraocular pressure are known as glaucoma. Primary glaucoma not an uncommon disease. Inflammatory glaucoma is confined almost exclusively to persons between the ages of 50 and 60. Not so with the chronic form. Under certain conditions the disease may be overlooked. One of the most serious maladies of the eye. The surgeon should ever be on the alert to discover its prodromic symptoms.

Dr. R. W. Miller, Los Angeles, in discussion, said that Dr. Church's was a short, practical paper on a most important subject. The name is used for a condition but little known, but well recognized. Causation but little known, and our classification must be clinical rather than scientific.

Dr. E. M. Wilder, Sacramento, said that in resection of the cervical ganglion, sympathetic system, he had met with but partial and temporary success. Constitutional conditions have been alluded to, and are important; gout, grief, condition of nervous system, are all important factors.

"The Pathology of Glaucoma" was the title of the paper by Dr. W. H. Roberts, Pasadena.

Pathogenesis and pathology closely associated, and considered together. The ciliary body the chief secreting organ of the eye. Snellen's description of the course taken by intraocular fluids. Immediate causes of (a) primary and (b) secondary glaucoma. Evidences of inflammation of sclerotic and uvea, involving scleral emissaries and vortex veins; changes in walls of arteries and veins of retina and optic nerve.

The paper by Dr. A. B. McKee, San Francisco, "Symptoms of Glaucoma," in the author's absence, was read by Dr. B. F. Church, chairman of the section.

Dr. W. B. Stephens, San Francisco, said that glaucoma is still in the field of many speculations. Albumin in the aqueous humor is the most weighty condition; when we have no albumin we have no glaucoma. The action is due to obstructing osmosis, thus preventing proper drainage. Has had but little experience with glaucoma, and especially with secondary glaucoma. He cited two cases of rather unusual interest, pathological examination of which he had not yet concluded.

Dr. W. E. Briggs, Sacramento, regretted that the subject could not be discussed before the general practitioners, who often delayed until too late to do any good. Some good general practitioners diagnose "cataract." But little of the etiology or pathology are known. Diagnosis would seem easy, and simple, yet men of great skill often differ after examination of the same case. Must consider many more than the text-book symptoms. Family history is often of value. Prodromal symptoms are not very valuable or reliable, though should be kept in mind. Trauma should have been given more prominence. He had seen a number of cases where a blow was the exciting cause. Eserin will relieve the pain.

Dr. Benj. F. Church, Los Angeles, said that much investigation is due. The field has not been so fully covered as ought to have been the case.

Dr. R. W. Miller, Los Angeles, said there is often great difficulty in making diagnosis, for many times we suspect glaucoma, but symptoms come and go. No cupping of disk should be done until the disease is far advanced. He cited a case in point where diagnosis could not be definitely determined for some time and cupping appeared only late.

Dr. H. G. Thomas, Oakland, thought tension should be taken almost always, and should be used as a very valuable early indication of glaucomatous tendency. Albumin and arterio-sclerosis go hand in hand and probably exist together.

Dr. C. S. Nagel, San Francisco, urged the great importance of carefully testing the visual field. It does not receive the careful attention it deserves. The young oculist is too often impressed with the causes given him to find an early and partial cupping. The field is not absolutely conclusive of glaucoma, but it can be better relied upon than increased tension. Physiologic tension varies even in fellow eyes. Pathology is but little known. Sympathetic ganglia may offer much hope, after more careful observations are made. Up to 1901, only five such examinations are recorded; thus far giving but little help. All forms of

primary glaucoma are of the same nature. The character of the glaucoma may change in the same individual.

Dr. Fred Baker, San Diego, said we all seemed to agree on all the points raised thus far, and especially the revelations of the ophthalmoscope. When the patient absolutely refuses operation, we should temporize, and leeching at the temple is of great value and should be more often used. He had seen glaucomatous symptoms disappear after use of leeches at temple, but they may reappear.

Dr. Roberts, Pasadena, regretted absence of many papers in the symposium. He cited a case in a student working with sledge on an anvil; a piece of hot metal seared the cornea and the eye could not be fully examined. It was dressed and bandaged. The following day, while weeding, the young man stooped over, and had sudden pain; he was seen in ten minutes. Hemorrhage found to have extended into the anterior chamber and paracentesis urged. He cited another case in which eserine and homatropine, alternating, a drop of each every hour, gave relief; eventual blindness resulted, however.

Dr. N. K. Foster, secretary of the State Board of Health, read a paper on the "Sanitary Needs of the State," in the section of Hygiene Sanitation and Climatology, in which he referred to the inadequacy of existing State Sanitary laws, the need of new laws and of sanitary officers.

The question was discussed by Drs. M. Regensburger, San Francisco, and C. C. Browning, Highlands.

CHEMISTRY AND PHYSIOLOGY.

"Innervation of the Heart With Consideration of Cardiac Stimulants," is the title of a paper read by Dr. O. O. Witherbee, Los Angeles. Drs. C. Krone, Harry M. Sherman, C. W. Murphy and S. J. Hunkin, contributed to the discussion.

Dr. Martin Fischer, Berkeley, read a paper on "Reversible Action of Enzymes."

"A New Chromogenic Air Organism—*Bacillus Cyaneus*," was the title of Dr. Ethel L. Leonard's paper. Dr. Ryfkogel discussed the paper.

MEDICINE AND THERAPEUTICS.

Wednesday, April 20—Morning Session.

"Observations Upon Sanatoria for Pulmonary Tuberculosis," by Dr. John C. King, Banning.

When properly conducted they are good, but they are not yet perfected. Sanatoria are becoming a fad, and many unethical men are promoting enterprises. No climate is best for all cases, and any climate will suit a certain number of patients. The value of the sanatorium depends upon the doctor who manages it. Sanatorium treatment may be carried on outside the sanatorium. Treat and consider each patient individually. There are two classes—incipient and well marked. The year following an apparent cure is a very critical one, and patients should be very carefully cared for during it.

The report of the Committee on Tuberculosis appointed last year was made, the report taking the time assigned on the program to Dr. Pottenger's paper on "Role of the General Practitioner in the Prevention of Consumption."

There were 2,308 deaths during the year; 161 contracted the disease during the year, outside of San Francisco; 3183 cases were under medical care; only 20 doctors objected to proposed methods for preventing the spread of the disease; opinions of over 1,000 physicians were taken and reported. The official returns show great need for better system of vital statistics. Death rate is 25 per 10,000 for the State, and 32 per 10,000 for San Francisco. All measures to bar out tuberculosics are bad and should not be undertaken. Education and careful treatment are the proper measures.

Report was referred to Business Committee of the House of Delegates.

"Healed and Quiescent Pulmonary Tuberculosis with Remarks on Pleural Tubercles," by Drs. George Blumer and A. J. Lartigau, San Francisco.

The papers previously published on this subject refer to healing or latency in pulmonary tuberculosis without strictly defining what they mean by these terms. Definition of what is meant by healed and quiescent (or latent) tuberculosis. Analysis of the authors' 500 cases. Importance of age in relation to healing of tuberculosis processes. Relation of sex to healing. Remarks on the frequency of tuberculosis of the pleura with statistics of 108 cases examined for them.

Dr. Pottenger's paper was then called for and read.

Resume of general conditions and death rate for some years past, notably in New York City; death rate seems to be decreasing. Condition of general health—or the soil for cultivation—is most important factor. No ordinary germs are dangerous to a really healthy individual. Hygienic lives will prevent the spread of the disease; it is easy, through proper living, to protect the well. Education can do much to aid in the work. Notification should be voluntary, and not meddlesome in character. Municipal tuberculosis dispensary urged as important. Early diagnosis and intelligent treatment could save 75 per cent.

Discussion of preceding papers, opened by Dr. George L. Cole, Los Angeles:—I am pleased to see so much interest taken in the symposium on this subject. In Italy, 125 years ago, they were agitating this question of preventing the spread of tuberculosis. The movement dropped, however, and we are but now waking up again. Thinks sanatoria a good fad and ought to be more so. Dr. Trudeau could have done more good in a better climate, in view of the great benefit of his work in the Adirondacks. Tuberculosis of the pleura seems to be benign. Some people seem to be immune and others very susceptible.

Dr. J. H. Parkinson, Sacramento:—Patient and friends must clearly understand the nature of the disease. Education of the public is essential, but very difficult. They believe in the heredity and the contagiousness of the disease. Should show them that all forms of the disease are the same, wherever located. Induce voluntary notification.

Dr. E. Von Adelung, Oakland:—Statistics generally lie, but those of the committee seem to be conservative. Patients do not like to be reported; the importance should be explained to them. Some diseases seem to prepare the soil for tuberculosis, and particularly measles.

Dr. E. A. Follansbee, Los Angeles:—Never allowed a class to depart from her instruction without telling them, "Never say, it's only measles, or whooping cough."

Dr. A. Barkan, San Francisco, considered the system of State dispensaries, as in France and Belgium, very valuable. Tuberculosis of the ear is common. Temporal bone is as often the seat of this disease as any bone in the body. Cases of otorrhea should be examined for tuberculosis.

Dr. E. E. Kelly, San Francisco, said that two points had been overlooked; we must discriminate as to the place where patients are to be sent. Municipal boards should require disinfection of tenement houses when families move out after a death. He cited certain districts in San Francisco where many deaths occurred.

Dr. John C. King, Banning, said that where he lives no patient has died for many years where the room and house had not been disinfected. No law requires this, and there is no health officer.

Dr. George Blumer, San Francisco, thought properly prepared and uncooked statistics were valuable. Heredity being carefully considered, recent studies seem to show but little weight. From 60 to 80 per cent of patients do not show bacilli in sputum until disease is too far advanced to combat.

Dr. Pottenger spoke of early diagnosis and thought careful examination should always give diagnosis to a certainty, and we should not wait for bacilli to appear. There is no special climate; good place, good pure air, good food are the essentials. The doctor in charge is the real strength of any sanatorium. Educate the people to look after themselves and take care of themselves and families. A municipal dispensary would do more good than a sanatorium. Thirty-eight per cent of the houses in a section in New York showed infection, and many cases recurred in these.

"Malarial Nephritis," by Dr. Geo. F. Reinhardt, Berkeley.

Malarial nephritis is not uncommon, but is far too seldom recognized. With quinine as a specific remedy, an acute nephritis of malarial origin can be quickly checked and a possible chronic state of the disease prevented. It is estimated that 3 per cent of all diseases of malaria have nephritis, the percentage being much higher in the estivo-autumnal infections. No particular form of nephritis has been identified as the result of malarial toxins, the pathological findings being that of a diffuse nephritis. The cases of nephritis reported were the results of a malarial

toxemia, as was evidenced by the blood examinations and the prompt relief upon the administration of quinine.

Dr. Walter E. Bates emphasized the fact that it was not the germ, but the antitoxin of the germ that produced the nephritis. In 50 per cent of malarias we have albumin in the urine.

Dr. Reinhardt, in closing, said we should be more careful in our diagnosis and not overlook the possible presence of malaria when we can give such prompt relief.

Dr. George L. Cole, Los Angeles, reported a case of mountain fever of low type.

Had some heart trouble and was told dilatation. Weight, 178 pounds; enlarged cardiac area; urine normal. Was in hospital three weeks; no temperature; no sign of tuberculosis; dyspnea increasing till death. Postmortem showed small tubercles in lungs; pericardial sac obliterated. Other organs showed passive congestion.

Dr. H. G. Brainerd, Los Angeles, never had seen such a case.

Dr. George H. Evans, San Francisco:—These cases are rare and should be carefully looked for. Inspection shows transverse wave moving from left to right.

Dr. George Blumer, San Francisco:—We frequently get Broadbent's sign, in these cases. They are often taken for valvular heart lesions.

"Illustrative Cases of Myelogenous Leukemia: Preliminary Report," by Dr. George H. Evans, San Francisco.

This paper gave a report of three patients suffering from this disease. One died, and a brief autopsy report was appended. Of the other two, one has been symptomatically cured, and the other has been much improved following treatment with the X-ray. The paper presented a summary of some of the recent work on the histogenesis of leukocytes, particularly bearing on this work as related to the disease under consideration, and urges caution lest we mistake temporary improvement for permanent cure.

Dr. George Blumer, San Francisco, thought diminution of white cells might be due to the destruction of degenerated cells by X-rays. This might also account for the chilly sensations, etc. No involvement of lymph glands, in many cases, and simple hyperplasia of the bone marrow does not always cause leukemia. Certain poisons attract leukocytes, and that may be the case here.

Dr. H. A. L. Rykogel, San Francisco:—X-ray action is destructive to protozoan life, and it may be so in these cases, for most of the cells are not, as suggested, degenerated.

Dr. Blumer: Protozoa have been described in this disease.

Dr. Evans: If theory of destruction is true we would have proportional decrease of other forms of cells, whereas this is not the case.

"Hydrotherapy in Rheumatism," by Dr. A. J. Sanderson. Correspondence with many places was reported to ascertain general methods.

Dr. E. H. Woolsey, Oakland, discussed the elimination of uric acid and the relief of rheumatism. The man who eats much meat is putting more food for rheumatism into his system than he can eliminate. A purely vegetarian diet will not develop rheumatism.

Dr. R. Crees, Byron Springs, said that there is much confusion over the term rheumatism, and many things are so called that should not be. True rheumatic conditions are not well known.

Dr. Evans said that exercise and baths are often bad when there is cardiac lesion.

Dr. Sanderson said that he avoided the causation intentionally, for it is disputed. He emphasized cold water treatment, for he thinks it better and safer than prolonged hot bathing.

Morning session adjourned at noon, the Section on Pediatrics to be taken up with the section on Ear, Nose and Throat, at the Congregational Church, and the Genito-Urinary section to occupy the hotel parlor.

On motion, the morning session decided that when it adjourned it should do so in memory of Dr. Charlotte Blake Brown, who died April 19th, at 6:30 p. m.

EYE, EAR, NOSE AND THROAT (Continued).

Afternoon Session.

The paper of Dr. M. W. Fredricks, San Francisco, on "Tonsils as Portals of Infection," was read by title and referred to the Publication Committee.

In the paper of Dr. Jas. A. Black, San Francisco, on "Surgical Treatment of Chronic Tonsillitis," he stated that the disease is best operable by the use of cold wire snare.

"Post-Operative Effects of Tonsillotomy," by Dr. Wm. B. Stephens, San Francisco.

Effects divided into (1) immediate and (2) ultimate. Chief of the immediate are: Hemorrhage, its sources and management; rarity of dangerous hemorrhage; pain; edema; infection. Permanent: Ill effects due to deformity; the function of the tonsil destroyed by disease; its extirpation justified and recommended. Removal of tonsils not always easy. Except for deformities, permanent effects all good. These good effects attributable largely to removal of obstruction as to breathing and deglutition.

Dr. Wm. H. Roberts, Pasadena, thought the tonsillotome the worst instrument ever devised, and dangerous in hands of inexperienced men. Hemorrhage may generally be controlled by pressure with the finger. Remote effects: general health practically always good. Cited case of boy, very deaf, who before operation could hear but 2 inches; after operation could hear 40 inches; before operation was stupid, and afterward was noted as unusually bright.

Dr. Parker said he had discarded the tonsillotome, and thinks the Bosworth snare is about the best.

Dr. Brown asked as to the best age to operate.

Dr. A. Barkan, San Francisco, said a few years ago conservatism appeared in connection with this operation. Schwartz a few years ago called attention to the error in removing both tonsils and adenoids at the same sitting. Should not operate for tonsillitis except in hospitals.

Dr. W. A. Briggs, Sacramento, said that a more radical operation than formerly is considered proper now. Operation may be slight, but is always important. Never operate on both tonsils and adenoids at the same sitting. May have considerable fever after operation, especially in children. Hemorrhage may be alarming after use of tonsillotome; use snare always in adults. Remote effects more considerable than we have believed.

Dr. Rowell, Pasadena, spoke of danger of hemorrhage following guillotine, more than from snare.

Dr. R. W. Miller, Los Angeles, said that hemorrhage is apt to be from anterior pillar.

"Report of Cases Simulating Grave Mastoiditis," by Dr. Fred. Baker, San Diego.

Case diagnosed grip complicated by suppurative otitis media with mastoid symptoms, chills and high temperatures. A blood count showed a septic condition of grave mastoid involvement to be improbable. Case proved to be typical typhoid fever. Other cases showing effect of grip and neuralgic habit in the causation of mastoid symptoms.

Discussion by Drs. Roberts, Briggs, Miller and Barkan.

"The Importance of Chronic Otorrhea, as Viewed by the Life Insurance Companies and the Medical Recruiting Officer," is the title of a paper read by Dr. A. Barkan of San Francisco.

Dr. K. Pischel demonstrated the use of collodium after nose operation. By placing a small fragment of gauze on the wound after removal of a section of the turbinate, and dropping a few drops of collodium on the gauze, while a stream of air is being blown in by an assistant, a hard membrane is formed and this stops hemorrhage.

PEDIATRICS.

"Neurasthenia in Childhood," by Dr. Hubert N. Rowell, Berkeley.

Neurasthenia occurs in childhood more frequently than is generally believed. It is caused indirectly by hereditary nervous taint, and is directly produced by brain-fag, severe nervous shock, social excesses, gastric disturbances and masturbation. It is a neurosis, often with a marked psychical element, as distinguished from hysteria, by nature a psycho-neurosis. Treatment consists of several weeks enforced rest (mental and physical), electricity, forced feeding, massage, hydro-therapeutics, animal extracts, strychnine and arsenic, while of paramount importance is attention to the psychical features of the disease, as to the abolition of the various forms of fear, and the creation of a feeling of self-sufficiency.

Dr. Kate Wilde, Los Angeles, stated that struggle in schools is a great cause of this trouble.

Dr. J. H. Parkinson, Sacramento, said that too infrequently is this condition noted by the general practitioner. He cited a case in child of nervous parents, who was hurt while playing. Spinal tuberculosis was suspected and the child watched; diagnosis was made and under treatment the child recovered. A second attack occurred, which was ignored; was sent to school and got along quite well.

Dr. C. E. Winslow, Bartlett Springs, had noticed a number of cases in children, which he thinks due to overwork in schools.

Dr. Edw. Von Adelung, Oakland, thought a good deal might be done to work in schools, but young scholars are restricted and cannot be much overworked. A child of a nervous mother is apt to be affected, not by inheritance,

but by training and constant suggestion. God help the girl with a nervous mother.

Dr. Charlotte Baker, San Diego, said that many children sent to school are better off than they would be if left at home with nervous mothers.

Dr. Rowell closed by saying he did not wish to asperse the schools, for they are better now than they were. Children need brain exercise. There is too much harping on school straining.

"Complications and Sequelæ of Measles," by Dr. J. Maher, Oakland.

Measles is a dangerous disease. Not given the consideration which its importance demands. It often gives rise to dangerous complications, and entails disastrous sequelæ. Physicians encourage indifference by their attitude toward it. The principal complications and sequelæ, and the causes which generally give rise to them; with suggestions as to their prevention. Why measles is so often followed by whoopingcough and tuberculosis. The relation of measles to broncho-pneumonia, laryngitis, gastro-intestinal disturbances, conjunctivitis, otitis-media, endocarditis and syphilis.

Dr. E. Von Adelung, Oakland, said the usual attitude is one of carelessness toward this serious disease. Contagion is not known, so the problem is difficult. We should advocate medical inspection of schools; they should be visited each day. Measles is too generally regarded as a simple disease, whereas it is a very dangerous one.

Dr. George H. Evans, San Francisco, said broncho-pneumonia with measles has a fatality of 70 per cent. He thought this broncho-pneumonia is often acute tuberculosis.

Dr. J. H. Parkinson, Sacramento, said that the Registrar-General of Great Britain says there are more deaths from measles than all other diseases of childhood.

Dr. Fred Baker, San Diego, cited the case of his brother who lost four out of six children from measles.

Dr. S. J. Hunkin, San Francisco, thought the chance of having measles twice is very remote; other eruptions are quite similar; generally there may be two, three or four attacks of other things which might be called measles. Many cases of tuberculosis in the bone have been observed as following measles.

Dr. H. G. Thomas, Oakland, and Dr. C. E. Winslow, Bartlett Springs, also discussed the points raised.

Dr. K. Pischel, San Francisco, said the physician should inspect the ears every day, and do prompt paracentesis if fluid be found in the cavities; this may prevent serious ear trouble.

Dr. Maher, in closing, said that the general opinion is that the disease is dangerous.

GENITO-URINARY.

"Contribution to the Study of Varicocele," by Dr. Dudley Tait, San Francisco.

Historical data. Etiology; role of cremaster; pathologic data; varieties; frequency; operative treatment; its propriety. Arguments against resection of the veins. Resection of the scrotum. Necessity for a simpler method in the treatment of a benign condition; clinical and experimental data concerning a new operative procedure. Operative indications in varicocele.

"Aseptic Catheterization of the Urinary Passages," by Drs. M. Krotoszyner and W. P. Willard, San Francisco.

1. Preparation for catheterizing. 2. Catheters; modes of sterilizing; effect on catheters; time required; methods of keeping sterilized catheters sterile. 3. Cystoscopy; sterilization. 4. Lubricants; variety; aseptic and lubricating properties of those adapted to the cystoscope. 5. Conclusions.

"Technic of Genito-Urinary Examination," by Dr. Geo. L. Eaton, San Francisco.

Examination of a subject with acute gonorrhea or other urogenital disorder. The technic of microscopic and macroscopic examination of urinary sediments, prostatic and vesicular secretions. Therapeutic suggestions.

"Fistulæ of the Male Urethra," by Dr. R. L. Rigdon, San Francisco.

"Report on Some Renal Tumors," by Dr. Harry B. Reynolds, San Francisco.

History of two cases. General consideration of symptomatology and diagnosis of renal tumors. Value of hematuria, cystoscopy and improved technic in palpation.

SURGERY AND ANATOMY.

Thursday, April 21—Morning Session.

Dr. Emmet Rixford, San Francisco, read a paper on "Inflammation of Appendices Epipolice."

Report of two cases. Probably a rather common condition: Due in most cases to formation of false diverticula in wall of the colon at point of penetration of blood vessels. These diverticula are far more common in the pelvic colon than elsewhere, and are especially frequent in those suffering with chronic constipation. May give rise to troublesome adhesions, localized abscess and, in rare instances, of rupture, to peritonitis. May simulate appendicitis (left sided) or malignant tumor of intestine. Some considerations in regard to diagnosis. Treatment, operative removal.

"Conservative Treatment of Acute Appendicitis" was the subject of the paper by Dr. A. W. Morton, San Francisco.

1—The history of the disease. 2—The cause, defective drainage and infection. 3—The practical division, acute and chronic. 4—The local symptoms are essential in making diagnosis. 5—The constitutional symptoms confirm diagnosis, and guide in selecting time for operation. 6—Leukocytes above 20,000, indicates effusion of pus into abdominal cavity, and patient should not be operated on until pus is washed off, which will be indicated by diminished leukocytosis and constitutional symptoms subsiding. 7—Operate early in the disease, or when the constitutional symptoms are good. 8—Advocates Oschner's treatment of rest. 9—Compares statistics of Oschner, with Deaver Richardson and Broca. 10—Report of 43 acute cases with two deaths.

Dr. Wallace I. Terry's subject was, "Cases of Acute Suppurative Appendicitis, Treated by the Oschner Plan."

Patients should be operated on between attacks, or after an acute attack with rupture has quieted down, and pus is walled off. Absolute rest of abdomen should be secured, and no liquid be given by the mouth. A small sip of water may develop dangerous peristalsis.

"Appendicitis: Some Points in its Diagnosis and Treatment from the Viewpoint that its Cause is a Strangulation Produced by Distention Behind a Ball Valve," by Dr. C. Van Zwahlenburg, Riverside.

Presentation of specimens of appendicitis produced in dogs by ligation and distention. Temporary obstruction and distention the cause of mild attacks. Weighing probability of obstruction continuing or having given way. Value of study of pain and tenderness. Determination of time when appendicitis becomes peritonitis. Being at outset a strangulation, treatment should then be by operation. Compared to strangulated hernia. Settle question of operation within first few hours. Disastrous policy of "waiting to see how patient gets on." Operate before peritonitis occurs or do not operate at all. Follow Oschner's plan.

Dr. Andrew J. Lobingier, Los Angeles, commented on the clear explanation of the Oschner method, and believed he was misunderstood. Commented on omission to mention work of Deaver and Oschner. Final settlement will be on middle ground and not extreme. Views of all are really not wide apart. Briefly discussed the theory of Dr. Von Zwahlenburg, with which he did not agree.

Dr. J. Henry Barbat, San Francisco:—Anatomical position of appendix gives rise to protean symptoms. The question of operation is a matter of judgment. No man's treatment as a hard and fast rule is going to be always best; use common sense. Perforation of the tip is the worst, and causes most fatalities. So-called acute cases are but manifestations of chronic condition.

Dr. Jules Rosenstirn, San Francisco, called attention to the danger of drawing off gas by needle thrust through the abdominal wall. That method has been abandoned by most surgeons. Danger from pressure on heart, or heart death, and for this lavage of the stomach is the best thing.

Dr. LeMoyné Wills, Los Angeles, thinks Deaver and Oschner are not misunderstood, and do not agree.

Dr. Harry M. Sherman, San Francisco, remarked that Oschner says when he is in doubt he waits.

Dr. Carl Krone, Oakland, spoke of physiology and development of the appendix. No special function for appendix, and it must be subject to retro-development.

Dr. George A. Hare, Fresno, thought radicalism bad, and agreed with Dr. Barbat that good common sense was more valuable than anything else. Cold as means of arresting peristalsis very valuable.

Dr. W. F. B. Wakefield, San Francisco, said that complete inhibition of peristalsis may be secured by use of calcium chloride.

Dr. Emmet Rixford, San Francisco, thought complication reported by him more common than generally believed. He endorsed the method of Oschner. Be careful in counting cases, especially cases of perforation.

Dr. Morton said that statistics quoted by Dr. Lobingier included all cases; the real death rate would be higher—about 14 per cent. Deaver and Oschner are not agreed. Barbat is right—use common sense.

Dr. Terry responded that Oschner has made his mark, while Deaver's loss drops from 14 to 4 per cent.

Dr. Von Zwahlenburg made some further remarks in support of the theory which he had presented.

"Intestinal Obstruction; With Report of Three Unusual Cases," by Dr. Charles D. Lockwood, Los Angeles.

Importance of early diagnosis; the fate of patients suffering with acute intestinal obstruction is largely determined in the first forty-eight hours. Resume of 1000 patients with acute obstruction operated upon since 1888. High rate of mortality is discouraging and does not add luster to surgical achievement. Diagnosis: Improvement must come through early diagnosis and operation, rather than through improved technic. Most important aids to early diagnosis: 1. Leukocytosis; 2. History of peritoneal inflammation; 3. Abdominal pain and reflex vomiting. Case 1. Strangulated diaphragmatic hernia induced by vomiting in the course of acute appendicitis. Case 2. Adherent Meckel's diverticulum associated with acute appendicitis. Case 3. Obstruction due to peritoneal band with some unusual features.

Discussion by Drs. F. L. Adams, W. I. Terry and Claire W. Murphy.

"Some Mechanical Aspects of Scoliosis and Demonstration of Apparatus," by Dr. James T. Watkins, San Francisco.

The normal spine is subject to the laws governing flexible rods. Side bending and rotation are always associated. The character of the rotation depends upon the anatomical configuration of the spinal segment in which rotation occurs. The changes present in a scoliotic spine can be produced in a normal spine by side bending from the flexed position. Simple curves in flexible columns might be cured by exercises and appropriate posturing. Compound and fixed curves do not respond to such treatment, because untwisting one segment increases the twist in the other segment. A fixed curve is no longer a part of a flexible rod, therefore, force exerted on it will be dissipated in the adjacent mobile portion of the column. Demonstration of Wullstein's apparatus for overcoming these difficulties.

Dr. P. C. H. Pahl, Los Angeles, commented on perfections of the apparatus demonstrated. Pled for earlier treatment of scoliosis; if taken before ten or twelve years of age is more easily treated and remedied. Danger from sending children to a brace maker; the child should be carefully studied; cast should not be left on for longer than 10 days. Put patients to bed and keep them out of sight; much better to make hospital cases of all such cases of scoliosis.

Dr. S. J. Hunkin, San Francisco, said that in theory the argument is based on things that are not so; the dorsal vertebrae are wider from before backwards. Cannot get hyperextension of dorsal vertebrae. Cited a case where two jackets reduced a very marked costal lump.

Dr. Harry M. Sherman thought it possible to secure extension of the dorsal spine.

Dr. Watkins, in closing, thought it no advantage to anesthetize patient; the machine does quite well enough.

"Congenital Dislocation of the Hip," by Dr. P. C. H. Pahl, Los Angeles.

Introduction. Definition. Cause. Statistics by Leonhardt Rosenfeldt of Nuremberg, including frequency, associated congenital and acquired deformities. Diagnosis: Inspection, Palpation and X-Ray Examination. Treatment by Hyprocates, Brabaz, Reiher, Paci, Heusner, Hoffa, Schede, Post of Boston and Lorenz. The report of three cases operated on by Prof. Lorenz in Los Angeles, California, 1902, presenting anatomical results. Conclusions: Operation can only be considered successful where stability is unquestioned and the antversion is not excessive. Unless these conditions exist, there should be a supplementary bloody operation; tearing of adductors should be superseded by prolonged stretching or spliced myotomy. Scoliosis, a serious complication, requiring early treatment.

Dr. S. J. Hunkin said he was much interested in the report, for it showed result in Lorenz's cases; they are all failures. Result successful only when head of femur is put in acetabulum and remains there.

Afternoon Session.

"Echinococcus of the Liver with Report of a Case," by Dr. Claire W. Murphy, Los Angeles.

Its cause. Its frequency in the United States and Canada. Description of the cyst wall and its membranes. The contained fluid. The termination of a cyst. Oftentimes not suspected during life. In whom found. Length of time growing. Few symptoms produced. Hydatid fremitus. Differentiation from other diseased conditions in the abdomen. Treatment. The necessity of removing the daughter cyst.

Dr. C. D. Lockwood, Los Angeles, said diagnosis is difficult, for trouble may be confused with the conditions men-

tioned by Dr. Murphy. He cited two cases where diagnosis was much confused, and empyema suspected. The treatment is well recognized and unquestioned.

Dr. Dudley Tait, San Francisco, said that Dr. Murphy is quite mistaken as to infrequency. The most unfaithful way to estimate is to consult books and journals and ignore reports of societies. Personally he had reported three. Diagnosis in cardiac surface of liver is generally overlooked, and effusion suspected. If hydatid cyst exists there will be marked deformity. Aspiration is dangerous, unless it is the first steps of radical operation. Delbe's method is to remove the entire cyst and a part of the liver tissue, and then dry and close with sutures. No adhesions follow on the site of incision. This is a matter of daily experience.

Dr. W. I. Terry said that the suggestion made by Surgeon Rhodes is very good. Exploratory operation to locate abscess or cyst, and then operation for removal. Subsequent operation is then very satisfactorily performed. This method should be of use with cysts as well as abscesses.

Dr. Murphy, in closing, was glad to acknowledge the value of the criticism and suggestions.

"Surgical Anatomy of the Inguinal Canal," by Dr. Claire W. Murphy, Los Angeles.

The walls of the canal. How best to open the canal, and where to open it. Why Bassini's operation is the best. The round ligament can always be found.

Dr. LeMoyne Wills said the difficulty lies in too many things and operations being recommended. Conditions and indications must be met and not some man's operation.

Dr. J. Henry Barbat said that he tells his students not to do somebody's operation, but close up the hole. Sew the tendons to Poupart's ligament, place the cord where it belongs, do the work well, and the result will be satisfactory.

Dr. Geo. A. Hare, Fresno, was glad to know there is always a round ligament. We should not continue to blame nature for our own mistakes. Alexander operation is not good, and is a back number.

Dr. A. S. Lobingier, Los Angeles, said he was glad to know round ligaments can always be found. The Alexander operation he considered one of the best we have and can use. It is well to enter the inguinal space from above, as suggested by Dr. Wills. No particular stress upon making three or four sutures; adapt to the conditions. "Faulty technique" may really be faulty material.

Dr. W. I. Terry approved of Barbat's suggestion to suit the operation to case and conditions.

Dr. O. O. Witherbee, Los Angeles, said in view of the fact that suppuration so often occurs, we should simplify the operation as much as possible. Should not be only a few men doing such operations, for any man who knows enough ought to be able to do them. Sutures remaining in a wound may give rise to minor trouble. Simplify operations as much as possible and encourage every man to do them. A wound may become infected in many ways. Do not multiply names of operations or parts. Avoid pressure as far as possible; close the wound as usual, but do not tie down on the skin; bring the sutures out a little distance away and attach to some framework that will hold it safely and not produce pressure. Young subjects absorb catgut very much better than older ones. Use an aluminium plate with perforations for easy placing and tying sutures.

Dr. Murphy, in closing, said he had little to add; he preferred the Bassini operation and always used buried sutures.

"A Case of Trigeminal Neuralgia, Presenting Some Unusual Features, Treated by Intraneural Injections of Osmic Acid," by Dr. T. C. McCleave, Berkeley.

Introduction of method by Bennett, 1899, consisting of exposure of nerves at foramina of exit and injection of 1½ per cent solution osmic acid into nerve substance. Sixteen cases cured by Bennett and Murphy. Present case twelve years duration. All kinds treatment, including two nerve-cutting operations; no benefit. Pain extremely severe on right side. Also milder pain on left. Two operations, first, typical one of Bennett, in which true condition of nerves not discovered. Relief only in supra-orbital branch. Second, disclose neuromatous condition of other branches, which were then injected and portions resected. Apparent cure. Discussion of probable spinal origin of pain in a bilateral case. Even if so, justification for operation.

Dr. H. M. Sherman had struggled with cases of this sort and considered it very valuable suggestion and a process to be tried before Cesarean ganglion operation is to be undertaken. Asked for information as to changes in nerve that follow the injection. Cited a case in which section of the nerve had been performed, resulting in loss of sensation, but no stopping of pain. On later removing the ganglion sensation was lost but pain continued. Pain probably due to talcs or bony tumor. It will be necessary to ascertain the action of the acid.

Dr. H. G. Thomas, Oakland, had examined nasal cavities and antrum and they were all right.

Dr. McCleave said Dr. Murphy is having animal experiments made, but is not ready to report; the experiments seem to show, however, that the acid acts on the nerve and destroys it slowly. Sensation seems to return after a time. In the case cited by Dr. Sherman, pain was probably due to central origin.

"Uretero-Cystotomy, with Report of a Case," by Dr. J. Henry Barbat, San Francisco.

Operation first done by Tauffer in 1877. Since then about 120 times. Ureter cut intentionally or accidentally during course of vaginal or abdominal operations, or during childbirth. Difficulty of implanting ureter into bladder through vagina; preference of abdominal routes. Unusual number of reported successes due to failure to report non-successes. Technic must be simple and not followed by contraction of cut end of ureter. Technic adopted by author after numerous experiments on dogs. Ureter split for one centimeter and flaps drawn into small incision in bladder by sutures, peritoneum of bladder incised and sutured over lower end of ureter. Anchor sutures to prevent traction on point of union. Report of case.

Dr. Dudley Tait, San Francisco, in discussion, said it was a pleasure to work with a surgeon of the Barbat type; good to have an operation worked out of the whole cloth and not merely be an adaptation. Animal operations are essential to perfect operations of this sort. German operations are awkward. The v-shaped cut was first used by Navarro, of Italy, but not used in this class of cases. We should consider ascending infection; it is more rapid and frequent in men than in dogs. The ureter is not only a passage for urine, but the lower end must protect the kidneys from ascending flow.

Dr. Geo. L. Eaton, San Francisco, said the total quantity collected for three to four months is important feature. Claire Smith of Seattle experimented on dogs, cutting out portion of ureter; later found atrophy of kidney on side of vesiculated ureter.

Dr. F. B. Carpenter, San Francisco, reported two cases of operation for replacing ureters, a section of which had been taken out. He had examined both ureters and the urine flows freely and equally from both. In one case, split ureter into three pieces instead of two, and operation was quite successful.

Dr. Barbat, in closing discussion, said the flaps stay long enough inside bladder wall to permit of adhesions. Tough tissues are brought into close approximation and held closely in place, so leakage does not occur. Back flow of urine is unimportant; back travel of infection is important. It is easy to draw the kidney down.

"Report of Case of Scleroderma Diffusa and Sclerodactylia; Its Clinical Aspect, Treatment, Postmortem Findings and Histopathology," by Dr. Alfred B. Grosse, San Francisco.

March 25, 1901. C. W., age 51 years. Skin of finger thin and parchment-like; muscles rigid; fingers flexed; forearms swollen and indurated. Motor function somewhat impaired. Skin and muscles of the face and scalp hard and indurated. Thighs, legs and feet involved in the process. This condition quickly progressed until nearly the whole skin became involved. Treatment: Salicylates, massage, constant current, thyroid extract, thiosinamin injections, arsenic and K. I. were used without result. April 30, 1902. Suicide with cyanide of potassium. Postmortem by Dr. Ryfkogel. Skin shows diffuse leathery thickening and all other organs show a peculiar hardness and seem gritty on section. Histopathology: Shows marked general increase of connective tissue and a well marked arteritis obliterans in the vessels of the skin.

Dr. Geo. Blumer, San Francisco, had seen six or seven cases, and recently an autopsy in which the conditions were much the same. Thinks it purely scleroderma and not sclerodactylia. There are changes in the bones of the hands in sclerodactylia.

Dr. Grosse said in conclusion, that at postmortem he did not take bones of hands, as should have been done. Bones were undoubtedly shortened. There was no marked endosteitis obliterans as is generally regarded as an essential.

HOUSE OF DELEGATES.

At the evening session Tuesday, April 19, the new constitution and by-laws was considered, section by section, and, with but few minor alterations, was adopted.

Riverside was selected as the place for holding the next annual meeting.

The following was the result of election for officers for the ensuing year:

President, Frank L. Adams, Oakland; first vice-president, W. T. Lucas, Santa Maria; second vice-

president, W. W. Beckett, Los Angeles; secretary, Philip Mills Jones, San Francisco; assistant secretaries, T. C. McCleave, W. F. Barbat.

For Board of Examiners, Drs. Dudley Tait, W. S. Thorne, San Francisco; J. C. King, Banning; George F. Reinhardt, Berkeley; A. L. Cothran, San Jose. Alternates, Drs. R. F. Rooney, Auburn; C. E. Lockwood, Pasadena; C. A. Dozier, San Francisco.

Councillors—at large: Drs. F. B. Carpenter, George H. Evans, San Francisco; F. C. E. Mattison, Pasadena. From districts: Drs. C. G. Kenyon, San Francisco; A. S. Parker, Riverside; H. Bert. Ellis, Los Angeles; T. C. Edwards, Salinas; George A. Hare, Fresno; J. Lambert Asay, San Jose; E. M. Ewer, Oakland; Thomas Ross, Sacramento, and A. H. Mays, Sausalito.

Committee on Scientific Program—Drs. Wallace I. Terry, San Francisco; Geo. L. Cole, Los Angeles; C. Van Zwalenburg, Riverside; J. C. King, Banning.

Committee on Medical Education and Legislation—Drs. J. R. Haynes, Los Angeles; F. B. Carpenter, San Francisco; C. C. Wadsworth, San Francisco.

At the meeting of the Councillors, held Thursday morning, Dr. Kenyon was elected chairman, and Dr. George H. Evans, clerk.

PHYSICIAN'S POSITION IN THE BODY POLITIC.

PRESIDENT'S ADDRESS.

(Continued from page 145.)

In appending the bibliography, the writer wishes to acknowledge the free use of two articles on "The Doctor in Politics"—one by Dr. John B. Roberts of Philadelphia, read before the American Academy of Medicine, and the other delivered by Dr. C. A. L. Reed before the Kansas City Physicians.

POLITICS IN MEDICINE.

Quaint Examples of Medical Men in Other Walks of Life.....*Medicine*

PUBLIC HEALTH.

American Public Health Association in Indianapolis, *Educa.* 22:237; City's Health: Living Conditions, Daniel, A. S.; *Munic.* A. 2:247; City's Health: Sanitary Construction, Wingate, C. F.; *Munic.* A. 2:261; Dust as a Factor in Disease, *Pub. O.* 30:495; Health of a City, *Sci. Am.* 89:254; Immigration Menace to the Public Health, Powderly, T. V.; *No. Am.* 175:53; Local Government Board and Dr. Scott, Tebb; *Westm.* 156:306; National Government and the Public Health, *No. Am.* 165:733, *R. of R.* 17:97; National Public Health Legislation, *No. Am.* 167:527, *Pub. O.* 25:654; Needful Improvements in the Public Health Service, *Sanitarian* 51:293 (Oct. 1903); Organized Effort in Behalf of the Public Health, *Sanitarian* 51:481 (Dec. 1903); Progress and Achievements of Hygiene, *Science N. S.* 6:789; Raising the Level of Health in Cities, *World's Work* 5:2711; Sand Filtration and the Death Rate, *Cur. Lit.* 32:164; Untidy Streets and Disease, *Sci. Am. S.* 54:22385.

SANITATION.

Bacteria Beds of Modern Sanitation, Priestly, E.; *Liv. Age* 229:496; Field of Municipal Hygiene, Jordan, E. O.; *Pop. Sci. M.* 63:132; Municipal Sanitation, *Westm.* 157:197; Quarantine and Sanitation, Wyman, W.; *Forum* 26:684; Sanitation and Social Progress, Allen, W. H.; *Am. Jol. Soc.* 8:631; Sanitary Administration of London, *Ann. Am. Acad.* 17:54; Sanitary Cleaning of Galveston, *Engin. M.* 21:456; Sanitary Condition of Pekin, *Pub. O.* 30:490; Sanitary Condition of Street Cars, *Sci. Am.* 86:306; Sanitary Condition of Street Cars in N. Y., *Sci. Am. S.* 53:22018; Sanitary Ills Disclosed by Hull House Workers, *Char. R.* 10:587; Sanitary Science and Preventive Medicine, *Sanitary Rec.* 32:133; (July 30, 1903).

CONTAGIOUS DISEASES, EPIDEMICS, ETC.

Contagion and Quarantine, White, Dr. J. H.; *Munic.* A. 2:286; Contagious Diseases, *Harp. B.* 34:656; How Cleveland Stamped Out Smallpox, Flower, B. O.; *Arena* 27:426; Municipal Suppression of Infection and Contagion, Lederle, E. J.; *No. Am.* 174:769; Prevention of the Spread of Consumption, *Ann. Am. Acad.* 17:377; Sanitation and Yellow Fever in Havana, *Sanitarian* 47:13 (July 1901); Sanitary Measures in Europe to Prevent the Spread of Plague, *Ind.* 49:340; Scientific Prevention of Yellow Fever, Doty, A. H.; *No. Am.* 167:681; Tuberculosis and Public Action, *Fortu.* 77:700.

GARBAGE.

Disposal of House Refuse in Bradford, *Sci. Am. S.* 54:21104; End of the Filth Theory of Disease, Chapin, C. V.; *Pop. Sci. M.* 60:233; Garbage Disposal, *Engin. M.* 13:392; *Engin. M.* 14:493; New York's Crematory for Light Refuse, *Sci. Am.* 86:328; Practical Cremation of Garbage, *Engin. M.* 24:270; Risk of Disease from Garbage Gathering, *Sci. Am. S.* 51:21033; Town Refuse Disposal in Great Britain, Goodrich, W. F.; *Cassier*, 21:99.

SEWERS.

Disposal of Sewerage, *Sci. Am. S.* 45:18743; Full Solution of the Sewage Problem, Scott-Moncrieff, W. D.; *Sanitarian* 51:385 (Nov. 1903); New Departure in Sewage Treatment, *Engin. M.* 12:855; Purification of Sewage and Water, *Edin. R.* 188:151; River Pollution and Sewage Purification, *Sanitarian* 48:116 (Feb. 1902); Royal Com. on Sewage Disposal, *Sanitary Record* 33:50 (Jan. 21, 1904); Sewage and Typhoid, *Sat. Rev.* 84:411.

HYGIENE IN SCHOOLS.

Certain Failures in School Hygiene, *Forum* 31:619; Hygiene as a Factor in Education, *Ed. Rev.* 24:391; Hygiene of Instruction in Primary Schools, *Jol. Ed.* 48:95; Medical Inspection of Schools, *Educa.* 18:460; Plea for the Teaching of Sanitary Science in Our Schools, *Educa.* 17:266; Relation of School and College to Health, *School R.* 11:817; Teaching of Hygiene and Sanitary Science in the Secondary Schools, *School R.* 6:65.

PUBLIC BUILDINGS.

Care of School Buildings, *Outl.* 62:734; Healthful Buildings, *Engin. M.* 14:864; Housing Conditions, *Munic.* A. 6:333; Improved Tenement Houses for Am. Cities, *Munic. A.* 1:745; Overcrowding, *Munic. A.* 2:254; Sanitary Equipment and Power Plant of a Modern Lodging House, *Sci. A. S.* 50:20576.

MENTAL AND PHYSICAL DEVELOPMENT.

Arrested Development, *Educa.* 22:202; Highways of Mental Growth in Childhood, *Ind.* 53:87; Mental Development in Man, *Sci. Am. S.* 14:18320; Physical Conditions in Education, *Educa.* 18:451; Physical Degeneracy, *Sanitarian* 51:289 (Oct. 1903); Physical Education in Schools, *Blackw.* 165:573; Physical Factor in Public Education, Willard, E. C., *Forum* 25:311.

MEDICAL LAW AND EDUCATION.

Better Training for Law and Medicine, *Educa. R.* 16:49; Drift of Modern Medicine, *Ecl. M.* 64:621; Forgotten Factor in Medical Education, *Educa. R.* 15:79; Medical Degrees in Germany, *Sci. Am. S.* 51:20941; Medical Practice and Law, *Forum* 31:542; Medical Progress, *Ind.* 49:79 (Jan. 21-97); Progress of Medical Education in the U. S., *Sci. Am. S.* 45:18199 (Mar. 5-98); Recent Activities in Medical Education, *Science N. S.* 8:631; Restrictive Medical Education and the Public, *Arena*, 19:781; Social Conditions in America in Their Relation to Medical Progress and Disease, *Sanitarian*, 51:3, (July, 1903).

PERSONALS.

Dr. H. D'Arcy Power has gone to England on a visit to his former home.

Dr. D. McC. Gedge, with his family, has gone for an extended stay in Europe.

Dr. Fred Williams has moved from Parlier, Fresno County, to Selma, and is now associated with Dr. Gilbreath.

Sir Knight Dr. C. G. Kenyon is to have direction of the hospital arrangements during the September convale of the Knights Templar.

Dr. O. W. Steinwand, in writing from Selma, states that the town has adopted a new health ordinance, providing for the regular inspection of milk and market products, by himself, as Health Officer, for which work he was voted a salary (?) of \$30 per month.

Changes of address, San Francisco: Dr. Wm. D. McCarthy, from 117 Twelfth Street to Inverness Building, Mason Street; Dr. W. M. Dickie, 402 Hayes to Inverness Building; Dr. H. Herrington, 467 Geary to 21 Powell; Dr. Harry Partridge, 233 Geary to 3050 Twenty-second Street.

PRESCRIBING PROPRIETARIES.

The practice of prescribing proprietary remedies by their trade name is not to be commended. The writer is cognizant of two patients for whom their physician prescribed a popular proprietary remedy by its trade name, with the result that both patients purchased the remedy of their own accord, omitted to consult their physician, used it with the usual indiscretion in such cases, and fell victims to its effects; in the one case it was the active agent in inducing melancholia that ended in suicide, and in the other it was a factor in producing general paresis with its physical and mental degradations.—(Bayley, in *N. Y. State Journal of Medicine*.)

SANITARY CONFERENCE.

Second Annual Meeting of the State, County and Municipal Body.

The conference convened at Paso Robles, at 10 o'clock Monday, April 18, and also held afternoon and evening sessions.

After a speech of welcome by Dr. Regensburger, president of the State Board of Health, Dr. J. W. Ward of San Francisco read a paper on "Food Adulteration." Dr. George H. Evans of San Francisco, in discussing the paper, said that vicious adulteration of food products is very extensive and dangerous. "We may talk a great deal, and read many papers, but something practical and actual must be done. Something ought to be done to counteract the work of the lobby against the Heyburn bill. The most important matter is the organization of the medical profession. I would suggest that resolutions commending the Heyburn bill be drawn up and passed by this conference."

Dr. Von Adelung of Oakland said he must rise and move that a committee of three be appointed to draft resolutions commending the Heyburn bill, and forward same to Congress.

Dr. Philip Mills Jones referred to the Auxiliary Legislative Committee of the A. M. A., outlining the purposes and work of the committee, explaining that through this medium it is now possible to get direct and cooperative action on important legislative measures.

Dr. John Haynes of Los Angeles remarked that "hoodle" is the strong thing in politics. Oregon had an excellent plan, allowing the people to introduce legislation by a seven per cent vote of the people. "We should pass a constitutional amendment permitting the people to vote upon such questions. Determined effort by medical men will permit of such an amendment, and will permit of proper pure food legislation."

Mr. Denicke of San Francisco: "This will be of no avail unless the manner of electing judges is changed. Our judges will not hold prisoners charged with these offenses, when brought before the bar. This should not be a State, but a National question. The federal courts are the only ones that can be relied upon."

Dr. LeMoyne Wills, Los Angeles, said in explanation that this conference wanted to draft a law giving the State Board of Health power to do something; at present it has no power.

The resolutions proposed by Drs. Evans and Von Adelung were passed.

Dr. Wills moved that all Representatives and Senators, and Senator Heyburn, be memorialized at once.

Dr. Simpson moved the appointment of a committee to draft a letter to be signed by everyone present.

"Sanitary Milk, from a Dairyman's Standpoint," was the title of a paper read by Mr. Pierce of Riverside, who referred to the value of lands in favored localities, and led up to the matter of producing good milk at a profit. He said the cost of keeping the best stock is no more than the cost of keeping poor, and good milk is in demand. Our climate is so good that herds should be in good health. All apparently sick cows should be at once removed. Holstein cattle are rugged and healthy and good milk and butter producers. The construction of barns is important; light, cleanliness and ventilation are important points. Most impurities get into milk after it leaves the cow and before it leaves the barn. The air in stables is one source of contagion. A pure water supply is important. Prompt and rapid cooling is very essential. As the proposition of a business man, he finds that it pays to produce the best.

In the discussion, Mr. Powers, Los Angeles, said: "If every dairyman would do as the reader, the problem would be solved. Too many people do not care for the quality of their milk product, but only for the money. There should be means provided for compelling these men to supply clean and sanitary milk. Milkers are often filthy and careless. They should be compelled to be clean. The first milk from the udder should be poured out; it contains the great majority of germs. I have milked cows in proper manner and the milk has stayed pure and sweet for ten to fourteen days. Inspection should be sufficient to insure clean work."

Dr. Philip Mills Jones, San Francisco, read, by request, the paper of Dr. Geo. H. Aiken, Fresno, on "Milk Supply and Sanitation of the Dairy."

Dr. Regensburger said it was simply murder to put out the sort of milk that is being supplied in many places. Most dairies are simply filthy and nasty beyond expression. The petty vendor should be done away with, but he will fight against any legislation.

Dr. L. M. Powers, Los Angeles, laid special stress on handling milk by improper persons, small dealers, etc. He reported the dissemination of diphtheria by a milk dealer in Los Angeles, the cultures coming from the throats of all the dairyman's family and the milker. Refilling bottles is a very dangerous thing and it is hard to catch the drivers doing it.

Dr. George H. Evans, San Francisco, had investigated but could find no dealer supplying good milk or keeping a proper dairy, and was surprised and pleased to hear the paper of Mr. Pierce and learn there was one proper dairy, at least, in the State. Boards of Health should look also for bacteria and not make chemical composition the only standard.

Dr. Wills, Los Angeles, said the public wants cheap milk, and does not care about impurities. Legislation will do no good in curing the evil. Some prosecutions can be forced.

Dr. Simpson of San Jose said the dairy furnishing the infected milk at Stanford was largely patronized, and people urged the health officer to permit the dairyman to continue selling milk. Typhoid contagion of both the well and milk were undoubted.

Dr. Philip Mills Jones called attention to the Department of Agriculture report on milk supplies of cities. No legislation seems to offer so much promise of relief as the plan of certification of properly conducted dairies and milk coming within reasonable standards.

At the afternoon session, Dr. Von Adelung discussed vaccination, and exhibited packages of virus from various sources of supply, and commented on their relative merits.

"Practical Disinfection," by Dr. W. Simpson, San Jose, and "Quarantine in Smallpox," by Dr. L. M. Power, Los Angeles, were papers covering these important subjects very fully.

The balance of the program was as follows, but owing to demand on the JOURNAL'S pages no abstract of the subjects discussed can be made in this issue:

"Collection and Registration of Vital Statistics," by Dr. O. Stansbury, Chico; "Medical Legislation," by Hon. W. I. Foley, Los Angeles; "Pollution of Public Water Supplies," by Dr. Thos. Ross, Sacramento; "Prevention of Tuberculosis," by Dr. C. C. Browning, Highland; "Medical Examination of School Children," by Dr. Mary R. Butin, Madera.

After the program was concluded at the evening session, a business meeting was held, at which Dr. LeMoyne Wills of Los Angeles was elected president of the conference.

COUNTY MEDICAL SOCIETIES.

Alameda County.

The Alameda County Medical Association held its regular meeting Tuesday evening, April 12. The meeting was called to order at 8:30 by the newly elected president, Dr. Jeremiah Maher, thirty-six members being present.

Dr. J. F. Lilley entertained the Society by reading an interesting paper in which he reviewed some of the notes taken by him during a post-graduate course in New York, about a year ago. The paper dealt in a very concise way with many of the ordinary diseases, and mentioned the main points in the treatment of the same as given by the specialists in each particular disease. In conclusion, the doctor described a method of treating hydrocele that he had used in eighteen cases with uniform success. This consists in the complete emptying of the sac by means of a trocar, followed by the injection of one or two drachms of pure carbolic acid, which was left in the sac. The advantages claimed for this operation are that no anesthetic is required; it can be done in the office; there is no retention from business, and it offers a complete cure.

The paper was fully discussed by Dr. Emerson, who took some exceptions to the treatment of hydrocele by the injection of carbolic acid, claiming that it is inadvisable to use this drug where its effects cannot be seen, there being considerable danger of causing sloughing of the tissues. He cited a case in which sloughing of the entire scrotum took place as a result of such an injection.

During executive session, a motion was made and carried to the effect that the Alameda County Association of Nurses be invited to hold its meeting in the Medical Society's rooms.

J. M. SHANNON, A. S. KELLY, Publication Com.

Kern County.

At the March meeting of the Kern County Medical Association the following resolutions were passed:

Whereas, The advertising, in our journals, of secret remedies, or the publication therein of recommendations of secret remedies or of trade-marked medicines of unknown composition is detrimental to the best interests of the medical profession, and in direct violation of the ethics of the profession, be it

Resolved, That the Kern County Medical Association, in regular meeting assembled, heartily commend and approve the position taken by the CALIFORNIA STATE JOURNAL OF MEDICINE in refusing to publish such advertisements and recommendations, and, be it further

Resolved, That these resolutions be spread upon the minutes of the Association and a copy sent to the editor of the CALIFORNIA STATE JOURNAL OF MEDICINE.

W. S. FOWLER, Secretary.

Los Angeles County.

On Friday evening, March 4, 1904, the Los Angeles County Medical Association held its regular meeting.

The first paper of the evening was read by Dr. F. M. Pottenger on "Specific Medication in Pulmonary Tuberculosis," in which he said, "The theme of every paper dealing with the treatment of tuberculosis should be that tuberculosis is a curable disease; the most curable of all chronic maladies. The claims of tuberculin and its allies to be considered as specifics is based upon their peculiar selective action which they have upon tubercular tissues, when injected into organisms affected with the disease. In 1,100 cases of incipient pulmonary tuberculosis tabulated by the

writer 20 per cent more patients were cured by the use of culture products than those treated by ordinary means. These remedies are only of value in tuberculosis, they must not be expected to combat a mixed infection or a case of pneumonia, nor must they be expected to replace the dead and dying tissue, which has resulted from the complications of the advanced stages of this disease. Specific remedies, no matter in what disease used, should be reinforced by every other measure of recognized worth. In tuberculin and its allies in early and non-febrile cases, and streptolytic serum in mixed infection, we have remedies, which, when added to ordinary common sense measures, remove much of the cloud hanging over this misunderstood and neglected disease, and prove it to be amenable to treatment and capable of cure in a large percentage of cases."

Dr. C. W. Seeber read the second paper on "The Treatment of Pneumonia." He said that of all things most necessary an abundance of fresh air is the desideratum in this disease. The patient's position should be frequently changed. The carbonate of creosote has acted as nearly as a specific as any drug in any other disease with which he was familiar. He begins with 15 minims, repeats it every two hours until two drachms are taken and then at three hour intervals until the temperature falls to 102°, after which time he gives about a drachm in the 24 hours until the patient is comparatively well. He also uses strychnia in sufficient doses to improve the heart's action, and relies chiefly upon coffee as a stimulant. He says, "I rarely give cough preparations of any kind, and as to external applications, I seldom use them."

The Los Angeles County Medical Association held its regular meeting on Friday evening, March 18, 1904.

Dr. E. M. Lazard read a paper on "The Localization of the Placental Site," in which he gave Professor Leopold's rules for locating the placenta as follows:

If the tubes converge upward on the anterior uterine wall to the fundus, the site of the placenta is the posterior uterine wall; if, however, the tubes assume approximately parallel courses along the sides of the uterus, the placenta is situated anteriorly. The courses of the tubes are marked in the following manner: First, the round ligaments are palpated with the palmar surfaces of the index, middle and ring fingers and are followed up to their insertions in the uterus, then the courses of the tubes are followed to their extremities and are marked on the abdominal wall with blue pencil. The left tube is more easily palpated. In Caesarean section, it is desirable to know whether the placenta is situated anteriorly, and to avoid cutting into it if possible.

Dr. John C. Ferbert read a paper on "Placenta Previa." He called attention to the difficulty of diagnosing this condition before labor, and spoke of the fact that text-books on obstetrics all recommend the vaginal tampon in treatment, with which he took exception, saying that a better method would be to note the amount of blood lost at each contraction of the uterus; if not severe enough to cause alarm, to do nothing, but if sufficient to cause anxiety to perform version by the Braxton Hicks method. If this cannot be done dilate at once and bring down a leg, after which labor can be terminated as seems best. He condemned the tampon because it did not control bleeding, concealing the condition only, and also on account of the increased danger of sepsis.

The Los Angeles County Medical Association held its regular meeting on April 1, 1904.

Dr. Kate Wilde read a paper on "The Difficulties that Present Themselves at the Onset of Lung and In-

testinal Troubles in Young Children." She called attention to the great necessity of having sick children in a Children's Hospital, and where this was not possible, a chart should always be kept and the symptoms carefully noted for the physician. The secretions from the lungs should not be allowed to be swallowed. Intestinal irrigation should be used. Food should be carefully given. The child's position should be changed from time to time. The child should not be waked at night for nourishment or medicine unless there be a condition present that requires stimulation. In the case of a breast-fed baby the mother's health should be carefully looked after. She says, "Always think of a beginning cold as a possible broncho-pneumonia, and treat every case of intestinal disturbance with as much care as a beginning typhoid, and you will avoid shoals."

Dr. F. O. Yost next read a paper on "The Place of Coal-Tar Antipyretics in the Therapeutics of Childhood." Among other things he said that when to the pyrexia in the diseases of childhood is added an excessively rapid pulse, delirium, dry mucous membranes, diminished kidney action, or threatened convulsions, it is evident that we should take active measures to reduce the temperature. In many cases we find it convenient and sufficiently safe to resort to the fever-reducing drugs, and by far the most reliable and effective drugs for this purpose are the coal-tar products. Beside the antipyretic action of these remedies, their analgesic and calmative effect are of great value. In the majority of sthenic fevers they are beneficial, especially if the course of the disease is naturally brief. But in asthenic cases, or those in which the toxemia is profound, we should avoid the coal tars.

The last paper of the evening was read by Dr. E. R. Bradley, on "Two Toxins Too Commonly Used," in which he deprecated the too free use of santalin, calling attention to its being a very common constituent of proprietary remedies for worms, and reported a case of acute poisoning by this drug in a child $2\frac{1}{2}$ years of age. He also expressed the belief that the fumes of tobacco are harmful to infants, some children being more susceptible to it than others, and reported a case in a child aged 14 months, in which, after careful observation, both he and the parents were confident that the fumes of the father's cigars had acted as a toxin to the child.

JOS. M. KING, Secretary.

Merced County.

The Merced County Medical Society held its regular meeting in Merced, at the office of Dr. E. S. O'Brien, on the evening of April 7. There was a good attendance, and the meeting was an interesting and profitable one.

Dr. O'Brien prepared the paper for the evening's discussion, taking for his subject, "The Menopause," which he handled in a very clear and practical way, drawing from a large fund of personal experience. One of the chief points of the paper was that we should always insist upon a thorough examination whenever a patient shows any abnormality in the menstrual flow.

W. E. LILLEY, Secretary.

Orange County.

At the regular meeting of the Orange County Medical Association, held in Santa Ana, April 4, the following officers were elected for the ensuing year: President, Dr. F. E. Wilson, Westminster; vice-president, Dr. R. A. Cushman, Santa Ana; secretary, Dr. H. S. Gordon, Santa Ana; treasurer, Dr. J. R. Medlock, Santa Ana; librarian, Dr. F. M. Bruner, Santa Ana.

Dr. C. D. Ball read the paper of the evening, his

subject being "Hyperchlorhydria." The paper was evidently the outgrowth of careful study. After advocating a carefully restricted diet as the only cure for this condition, the Doctor invited those present to partake of oysters, salads, cakes and coffee, thus assuring them that he did not mean what he said in his paper, so far as his guests were concerned.

H. S. GORDON, Secretary.

San Benito County.

The San Benito County Medical Society met in regular session on April 4, in the offices of Dr. G. C. Porter, with Dr. J. H. Tebbetts in the chair. Roll call showed four members absent, those present being Drs. J. H. Tebbetts, R. W. O'Bannon, G. C. Porter, J. D. Ball, F. O. Nash and J. M. O'Donnell.

The subject of "Typhoid Fever" was thoroughly discussed, the etiology and pathology having been assigned to Dr. J. D. Ball, symptoms to G. C. Porter, diagnosis and prognosis to Dr. L. C. Hull, and treatment to Dr. R. W. O'Bannon.

On motion, a committee of three was appointed consisting of R. W. O'Bannon, G. C. Porter and J. D. Ball, to draft a set of resolutions commending the stand which Editor Dr. Philip Mills Jones has taken in reference to the advertisement of secret remedies or medicines.

Pneumonia (Lobar) was selected as the topic of discussion for the next meeting.

J. M. O'DONNELL, Secretary.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held in their rooms on Tuesday evening, April 12, the president, Dr. J. Rosentstirn, in the chair.

The Committee on Admissions reported favorably on the following applications for membership: A. S. Adler, R. H. Ashby, P. A. Bill, Geo. I. Bluhm, Geo. T. Brady, Peder Brugiere, R. Cadwallader, George R. Carson, E. P. Driscoll, Henry W. Gibbons, Chas. D. Gleason, Calvin L. Gregory, D. A. Hodghead, J. O. Hirschfelder, Calvin W. Knowles, Sophia B. Kobicke, Otto Laist, Joseph P. LeFevre, George Painter, H. G. Plymire, W. P. Head, G. H. Richardson, Harry P. Roberts, John Robertson, Thos. W. Serviss, Driesbach Smith, H. O. Von der Lieth, Jos. von Werthern, A. H. Voorhies, A. S. Waiss, Alanson Weeks, Otto F. Westfeld, Thomas W. Williams, Herman F. Wilson.

The Committee on Ethics submitted the following report:

The attention of the Committee on Ethics has been called, by a member of the Society, to the recent organization in San Francisco of a mutual medical aid society known as the "San Francisco Medical Aid Society," whose members are furnished with medical attention and medicines for themselves and their entire families for one dollar a month. The society publishes a pamphlet setting forth the plan of organization and the advantages of membership and giving on the title page the names of a number of members of the San Francisco County Medical Society as the medical staff. Two pages are then devoted to enumerating a partial list of the diseases for which treatment in the acute stage only is given. The question has been raised whether the use of the names of physicians who are members of the County Medical Society in connection with the advertising matter of institutions of the kind is not a breach of medical ethics.

Your committee has gone very generally into the question of contract services of physicians employed by these societies, by organizations of a social nature and by institutions supported by tax upon the employees of large corporations existing in communities where medical services can be easily obtained.

It is the opinion of this committee that all forms of contract services are subject to great abuses and that they are neither conducive to the welfare of the patient nor compatible with the dignity of the medical profession; second, that there is a constant tendency

to commercialism in such enterprises at the expense of the medical profession and to the detriment of the public evidenced by the formation of the society mentioned above; third, that this society (The San Francisco Medical Aid Society) is a purely commercial enterprise; fourth, that in advertising the treatment of a list of ailments in connection with the names of physicians, a breach of the principles of medical ethics outlined in Section 7, Chapter 2, of the Revised Code, has been committed.

It is manifestly impossible to correct all of the abuses of this kind already existing in San Francisco, yet your committee are unanimously agreed that even the best of these institutions have conducted to a lowering of ethical standards. Therefore, in order that this society shall put itself on record as being opposed to contract medical service, and in order to prevent, if possible, in the future use of the names of medical men in the advertising of any of these institutions, the committee offers the following resolution:

Resolved, That it shall be contrary to the By-Laws of the San Francisco County Medical Society that any member thereof shall permit his name to be used in connection with the printed advertising matter issued by or authorized by any institution, society or lodge founded upon the principle of mutual medical aid, and that the By-Laws be amended in accordance therewith.

Philip King Brown, Albert Cohen, Emmet Rixford, D. A. Stapler, Committee.

Dr. Philip King Brown, chairman, also offered the following resolutions:

Resolution No. 1.

Be it resolved, That the San Francisco County Medical Society, in regular session, approves, endorses and commends the policy of the CALIFORNIA STATE JOURNAL OF MEDICINE in excluding from its pages all advertisements of remedies or preparations of unknown composition, and all mention of or reference to them in the scientific papers published.

Resolution No. 2.

Whereas, The proper, conscientious and intelligent practice of medicine demands that the physician shall know the composition, quantity and therapeutic action of all such medicine, medicines or medicinal preparations as he prescribes, dispenses or recommends in the treatment of the sick, and

Whereas, The use of secret medicines, medicinal preparations, nostrums, etc., has been declared to be unethical by the American Medical Association and the Medical Society of the State of California, therefore, be it

Resolved, That it is the sense of this Society that legitimate pharmacy, as distinguished from the commercial drug store in which all varieties of secret proprietary preparations and nostrums, etc., are sold and recommended, should be encouraged and helped by the proper support of the medical profession. And to this end, be it further

Resolved, That a committee of three be appointed to devise ways and means whereby legitimate pharmacy may be stimulated and the druggists of this city and county may be persuaded to desist from the practice of carrying, selling, dispensing or recommending all secret proprietary preparations, nostrums, etc.

Resolution No. 3.

The following by-law is presented to the Society: No member of this Society shall permit his name to be used in connection with the printed advertising matter issued by or authorized by any institution, society or lodge founded upon the principle of mutual medical aid.

The resolutions were taken up serialim and unanimously passed, in the case of No. 2 the president announcing that he would appoint the committee within a day or two. In the matter of change in by-laws, as proposed in No. 3, under the rules further action was laid over for one month.

The special committee appointed to draft a minute on the death of Dr. Charles H. Roese, reported as follows:

We, the members of the County Medical Society of San Francisco, conscious of the great loss we have sustained by the death of our honored member, Chas. H. Roese, and desirous of expressing our feelings of high esteem for the deceased, be it hereby

Resolved, That by the death of Dr. Chas. H. Roese, this organization in particular, and the community generally, have lost a valuable member of our profession, who gave great promise of a useful and distinguished career for the future.

Resolved, That we acknowledge his loss with profound sorrow and tender his widow our deeply felt sympathy and condolence in this her hour of great bereavement.

Resolved, That these resolutions be inscribed in our minutes, and a copy thereof be transmitted to the widow of our deceased colleague.

Martin Krotozyner, E. O. Jellinek, Max Salomon, Committee.

The president appointed Drs. A. W. Perry and J. B. Frankenheimer a committee to prepare a minute on the death of Dr. Thomas B. DeWitt.

The president announced the death of former president, Dr. Louis A. Kengla, and appointed Drs. F. B. Carpenter, George H. Evans and Philip Mills Jones a committee to prepare suitable resolutions.

On account of increase in membership it was announced that the Society was entitled to additional representation at the coming meeting of the State Society, and upon ballot the following were elected: Drs. Frank Dray, S. J. Hurkin, Philip King Brown, and C. S. G. Nagel.

On motion, the delegates to the meeting of the State Society were instructed to advocate action by the State Society toward securing the next meeting of the American Medical Association in San Francisco.

The scientific program consisted of demonstrations of pathological specimen, by Dr. A. L. Fisher; "Tendon Transplantation," patient presented, Dr. S. J. Hunkin; "On the Use of Alkalis and Antacids in Gastric Diseases," Dr. A. W. Perry; "On X-Ray and Use of Static Machine," Dr. J. C. Gregory, U. S. A.

Dr. Fischer presented specimen giving the following history:

The specimen demonstrated is one obtained from a man aged 43. On admittance to the Mount Zion Hospital the man complained of pain in the upper portion of the abdomen. The family history was negative. In the personal history we found that nineteen years ago he had had stomach trouble with pain and tenderness with some vomiting and loss of appetite. He recovered from this entirely. There was no further trouble for nine years. Ten years ago he had attacks of pain in the upper portion of the abdomen. He would get these attacks every few months. They would last a few days, or a week. There was great pain in the upper portion of the abdomen. These attacks lasted for ten years. The present illness began two weeks before admission to the hospital. There was more pain than usual. Great pain in the upper portion of the abdomen. It was found that he was very much emaciated. There was nothing in the chest or reflexes. The abdomen showed a movable mass in the upper right quadrant, about three finger breadths below the costal margin, continuous with the liver. Dullness was found over this area. The hemoglobin was 39 per cent red, blood count over two million, diminished acid in stomach analysis. Urination normal. Operation was advised. On the second day the patient passed blood in the stools. He had two or three tarry movements every day for the next few days. Continued to have severe pain, and after five days decided to permit operation. An incision was made along the outer border of the right rectus showing that the stomach was densely adherent to the liver about the region where the gastro hepatic ligament should be. The gall bladder could hardly be made out. The adhesions were separated and a gastro enterotomy thought to be done on account of the relation of the stomach and liver, but the condition was such that it was not attempted. The abdomen was closed and the man sent back to the ward. He continued to have these pains, and gradually sank. Tarry stools, hemoglobin 18 per cent. He died about one month after the operation. Complete autopsy was not allowed, but we managed to remove this mass of tissue. It is most of the stomach, duodenum and a portion of the liver. When taken from the body, the relations could not be made out. It was seen that there was an out-pocketing from the duodenum. Seen also that there was an opening immediately from the gall bladder into the duodenum and that the liver was exposed. Evidently gastric ulcer that had perforated posteriorly around the region of the cystic duct, and probably the cystic duct had been digested away. The specimen is presented because it is very rare. The duodenal ulceration occurs in about one in 250 autopsies. This has been described about nine times. This connection of the duodenum with the gall bladder has never been described, as far as I can learn. There are several cases on record in which there has been an opening from the duodenum into the gall bladder, but in this case the cystic duct remained. Here the cystic duct has been apparently digested away. The liver is at the bottom of the ulcer. Gall bladder opening immediately into the duodenum. At the time of the operation ulcer was suspected from the arrangement of the stomach and liver.

Dr. Rosenstirn, discussing the specimen presented by Dr. Fischer:

The adhesions were adhesions extending from the large curvature to the surface of the liver, and they formed a sort of kink of the pyloric portion of the dilated stomach so that by severing these adhesions a better physical formation of the outlet of the stomach was obtained and we thought that perhaps part of the reason of dilation of the stomach was coming from these adhesions in preventing a free emptying of the stomach through the biliary opening. At the same time we suspected an ulceration of the duodenum, and also thought that the liver formed the base of the ulceration. We were only prevented in making the gastro-enterotomy through the condition of the patient. We thought afterward that by rectal feeding and absolute rest we might get the patient into condition to perform the operation. The wound healed by first intention, but the patient gradually sank.

Dr. Stunsky: "I saw the patient before entering the hospital, and saw him in an attack of pain, which was pronounced a very severe attack of hepatic colic. They thought he had gall stones."

Dr. Weiss, discussing paper by Dr. Perry:

In some forms of hyperacidity we may frequently apply acids without avail, and I find that the administrations of bromide, especially the strontium bromide, is followed by excellent results. It seems that the pouring of HCl into the stomach in increased amounts often gives the result of neurosis or hyperaesthesia. This may be a theoretical explanation of the good action of bromide.

Dr. Perry: "I did not recommend these substances in acidity of the stomach, but only wish to state what is the use of one or the other. I am far from recommending the use of antacid in cases of hyperacidity."

Dr. Sherman, discussing paper by Dr. Hunkin:

This paper has been one of great interest to me, because I think that Dr. Hunkin and I began our work in this line about the same time. We worked through a period of hopefulness and disappointment. The disappointment lay in the fact that we were planting live muscles on the dead tendons. The function of the live muscle was lost. The change from that was to transpose the live muscles to insertions of their own, and, if possible, with their own tendons. I think it was all of five or six years ago that, in trying to do that, I used silk as a method of elongating the tendon, ignorant of anybody else's work. The operation was a failure for reasons which I do not understand. The silk is still in that boy unaffected. As far as the method of transplantation is concerned that is all I have to say, because the use of a silk string in place of the tendons I have had no personal experience with. My patient is not ready to have the splints taken off. As regards the rest of Dr. Hunkin's paper I do not know exactly how to say what I want to say. I cannot agree with his statements, and I think that the case which he brings here this evening disproves his theory. To say that a muscle does simply as the brain wishes it, would throw aside all the terminology of the neurologists, all of the anatomy of the anatomists, and would make us believe that any one part of our bodies could be made to do almost any other function than that for which it was intended. If it is true that the flexor can become an extensor, and not an extensor from cerebral impulse, but an extensor automatically, then why is it that a certain portion of the brain can have its function suspended by a little clot or the pressure of a piece of bone or an abscess. If there is anything at all in cerebral localization, the same rule must work through the whole nervous system. It is impossible to think that a flexor can become automatically an extensor. In proof, let us take this child. If you seat this child on the table with the leg hanging down, the non-paralyzed child will kick the leg. The paralyzed child lets it swing out. It looks as if it were active when it is paralyzed. Taylor, of New York, brings that out in cases of Lorenz operations for hip trouble. With a child with quadriceps extensor paralysis, he lets it swing out. The same way a child on a table or bed learns to make use of the muscles whose natural function it is to make motions, and make it appear that they are making motions with their muscles which are paralyzed. This child, lying on the table, could be told to extend his leg, and if you had your finger on the gracilis you would find that contracts at the same time that the other did. When I sat him on the side of the table and supported his foot, I told him to kick his foot up, and held my finger on the gracilis tendon, and the tendon did not contract—did not make the motion of extension. When I told him to flex it, it did flex. I think that the boy does not yet differentiate. I think that if he ever does it will be by cerebral action and never by anatomical. It is unthinkable that a human being can so change the anatomy of his nervous system that he can reverse the action. The use of the silk is good, though my experience is limited to one case.

Dr. Watkins, discussing paper read by Dr. Hunkin:

I had the pleasure of calling attention to Lange's method of the subperiosteal implantation of healthy tendons last year at the meeting of the State Medical Society at Santa Barbara. At that time I reported the final results on six of his cases two years subsequent to operation. It seems to me that not enough cases have yet been operated upon by this method, nor has a sufficient time elapsed to permit of our speaking with anything approaching authority on the modifications which may or may not occur in the function of a muscle which has been transplanted. I am inclined to think that Lange's ideas are near the truth. He attempts to maintain the four independent motions of the foot, and to that end uses whole muscles, when he can get them, which are capable of independent action, expecting them to modify their functions to meet the exigencies of their new conditions. He does not hesitate to reverse the action of an independent muscle, if need be, however. Take for example the case where all the muscles are gone except the common flexor of the toes and the gastrocnemius. Lange carries the tendon of his common flexor to the front of the leg and attaches it to the dorsum of the foot and expects that it will antagonize the gastrocnemius in its new position, that is, it will become a dorsal flexor of the foot or the leg. I do not think that if one muscle of a group, which, acting together, perform a definite function, be transplanted, it will learn to contract independently of the rest of the group. Such a result would not correspond with Lange's findings. In several of Lange's cases the tibialis anticus had been split and the outer half inserted into the dorsum of the cuboid. I convinced myself that the transplanted part of this muscle acquired a new function—became a pronator of the foot, in fact. The method of examination I used, beside palpation, was to place the patient's leg and foot with their inner borders resting on the table, while I held the leg down and at the same time palpated the tendon; the patient was instructed to abduct his foot, that is, to raise it from the table. This, several patients were able to do. In no other muscle did I observe this phenomenon, nor does Lange report such. I repeat, the subject is too new and not sufficiently threshed out yet to admit of much more than speculation.

Dr. Frisbie, discussing paper read by Dr. Hunkin:

The case is very interesting to me. I have had no experience in these cases. It does seem as though it was demonstrated that it is possible to do it. The time is brief. It seems a revolution of all our ideas of how muscles should work and yet, after all, they are only the agents of the brain, and if the brain can educate them they may be made to do these things, reasoning about it as we please.

Dr. Carpenter, discussing case of Dr. Hunkin:

I wish to call attention to an article published in the *Journal of the A. M. A.* on nerve anastomosis. It strikes me as rather forcible in regard to these cases. An anastomosis was made between the paralyzed seventh nerve and the spinal accessory and the statement was made by the author that in the course of a few months or a year that the constant training of the new group of muscles was obtained. That is simply in harmony with the training of these muscles.

Dr. Barbat, discussing case of Dr. Hunkin:

The matter is only of the education of the muscle, and there is no doubt that if one part of the body is defective that naturally allows other parts to be educated to take the place and to function in the place of the part destroyed. A muscle if transplanted and trained by the individual will perform these functions after a while. The individual can educate that muscle, and it will go on and perform those functions in an automatic way.

Dr. Hunkin, closing discussion:

I rather expected the internal medicine man to take up this subject. There are quite a number of questions to be discussed about the nerve. I am not sure, but I think I remember that when the cerebral path is broken between the cerebrum and the parts of the body that the impulse does go by a new path. The Creator has made various paths outside of the direct one. We may say that a certain muscle was intended to do a certain action and nothing else. Well, I do not know that to be a fact, and I doubt if anyone else does. You take the flexor digitorum. It is one muscle. I can flex one finger without flexing the others. The part of that muscle must have learned to contract from other parts. It is true that a muscle contracts as a whole and with the group to which it belongs. So does the flexor digitorum, yet that muscle is able to differentiate its certain branch of fibers. In this boy, he could flex his knee. He must have been using the flexor muscle. The boy now can extend his knee. The muscle has turned over from flexor to extensor. It is extensor action that this boy has in this case.

Dr. Barbat, discussing Dr. Gregory's paper:

The doctor has gone very thoroughly into detail with regard to this apparatus. I do not think we can add anything, except a few little points which I have noticed. One little thing we will always notice; in order to become expert, you have to do a great deal of work. No one can become expert in a few days. I find that by first gauging the strength of my tube, I can determine the amount of strength it will stand. The average it will stand is 112 volts for a few seconds, except the extremely thin platinum tubes. The other tubes will stand full strength of the coil, and I have taken pictures, except stout people's abdomens, in three seconds. In children the pelvis in three seconds and the hand instantaneously. Of course the operator wants to be careful of the tube because the average platinum will heat up in from 2 to 3 seconds. With regard to the plates, by comparing one plate with another, I find the standard plate has given me the best satisfaction with regard to the length of exposure. With regard to developing plates I use weak solutions.

Dr. Hunkin, discussing paper read by Dr. Gregory:

The best picture I have seen taken was in Liverpool. There was used a solution of bichloride acid just three times the strength of the acid usually employed here.

Dr. Hubbell, discussing paper read by Dr. Gregory:

I have had considerable experience in this work and I have tested nearly all the plates on the market. I have tested them very thoroughly and I have gotten the most satisfactory results from the Cramer X-Ray plates. It is very evident to me that for X-Ray photography you require a certain character of emulsion. I believe it should be richer in silver than any ordinary photography.

Dr. Cooper, discussing paper read by Dr. Gregory:

I have been asked by two different clinics to look around for a static machine, and I have not found one which I would recommend them to use instead of the Queen coil. With regard to the photographs, I have been fortunate in them. I have one which shows a stone in the kidney. These were not taken instantaneously, but with 32-plate static machine. I find it does not matter much what machine is used; it depends upon the technic and the tube you get. If you get a good tube, that tube should be kept for the kind of work it is being used for.

San Joaquin County.

The San Joaquin County Medical Society is showing unusual interest in Society meetings this year. We now have thirty-one members and hope soon, by the addition of adjacent county members, to increase our membership materially.

At the February meeting, Dr. R. R. Hammond read an interesting paper on "Haematuria." The paper was freely discussed. The Doctor reported the following interesting case:

Mr. E. McL., aged 36, complained of passing blood in his urine for the last two months. The urine was normal in amount, passed freely and was voided without any pain or inconvenience to the patient. The prostate, urethra, and bladder were carefully examined. His family history was negative. The patient was in first-class condition, attending to his professional duties as usual, no temperature, night sweats, appetite good.

Microscopical examination showed the urine to be filled with red blood corpuscles, a few white, and one or two casts, with a number of epithelium cells.

On the evening of February 26, two days after I had first been consulted, and two months from the beginning of the trouble, I was sent for, and found the patient suffering intense pain in the back, running down into the groin and radiating into the testicle. His wife told me that that morning the urine voided was almost pure blood; the pain began later and gradually increased in severity. I gave a hypodermic of morph. sulph. grs. 1-2, and atrop. sulph. grs. 1-150. The patient had a fairly comfortable night and the next morning passed several very small calculi, the urine was still bloody, but in three days was clear and has been ever since.

The next meeting will be held at the office of Dr. E. Harbert.

The Society met at the office of Dr. E. Harbert on Friday evening, March 25.

Dr. Harbert read a paper on "A Case of Gallstones," the report being received with much interest.

The Society will meet next month at the residence of Dr. A. W. Hoisholt.

BARTON J. POWELL, Secretary.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular monthly meeting in the parlor of the Arlington Hotel, April 13, 1904, the president, Dr. Charles Anderson, in the chair. Drs. Charles Anderson, Wm. F. Blake, W. B. Cunnane, W. H. Flint, L. F. Mansfield, H. Sidebotham and C. E. Vaughan answered to roll call.

Dr. Blake reported a case of fracture of the tibia and fibula extending into the ankle joint, treated by adhesive strapping and molded pasteboard splint.

The paper of the evening, "Pernicious Malarial Fever," was read by Dr. Blake. Notwithstanding the fact that malaria is absolutely unknown in Santa Barbara or vicinity, the Doctor's paper, accompanied by a report of two cases, excited a great deal of interest; it was an exchange of reminiscences of the experiences of the various members acquired in other climes in the misty past, and was enjoyed very much. A motion was made and carried thanking Dr. Blake for his able paper.

An application for membership by H. C. Bagby was read and referred to the proper committee.

On motion of Dr. W. H. Flint, seconded by Dr. C. E. Vaughan, Dr. C. B. Bates was elected to honorary non-resident membership.

On motion of Dr. Cunnane, seconded by Dr. C. E. Vaughan, Dr. W. T. Lucas was elected second alternate delegate to represent the Association at the meeting of the State Society in case the regular delegate, Dr. Charles Anderson, or alternate, Dr. D. A. Conrad, should be unable to attend.

The report of Dr. C. E. Vaughan, chairman of the committee appointed for the purpose of drafting appropriate resolutions respecting the death of Dr. R. Mackinlay received, and on motion was adopted:

Resolved: That the members of the Santa Barbara County Medical Society wish to offer as a last tribute of love and respect to the memory of the late Dr. Robert Mackinlay. Although his failing strength debarred Dr. Mackinlay from taking part in the recent reorganization of this Society, the older members will remember his unflagging interest in its welfare in former days. He was bound to us by ties of personal friendship and professional comradeship. We respected him as a man, admired him as a physician and loved him as a friend.

The medical profession has lost a wise, skillful, conscientious and sympathetic practitioner, and the community a member who was faithful to every public and private obligation. In every relation of his life his record stands without a blemish.

To the family of our late associate, we offer our deep sympathy.

Resolved: That a copy of these resolutions be presented to the family of our late associate, and that they be published in the "Santa Barbara Press" and "The Daily News."

Dr. W. H. Flint offered the following resolution, which was adopted:

Resolved: That the members of the Santa Barbara County Medical Society having carefully considered the provisions of House Bill 6295, entitled, "A Bill for Preventing the Adulteration or Mishandling of Foods or Drugs and for Regulating Traffic Therein, and for Other Purposes," as amended by the Senate Committee on Manufactures, and now pending before the Senate (Calendar No. 1165), do hereby respectfully represent that the provisions of said bill are essential to the proper protection of the public welfare, and, consequently, hereby respectfully petition that the same be enacted into law at the earliest possible moment. All of which is respectfully submitted.

W. B. CUNNANE, Secretary.

Multiplication of Bulletins.—It is announced that bulletins of pathology are to be issued from the Medical Department of the University of California under the auspices of the Pathological Department. It is a matter of regret that original work of merit should continue to be published in special bulletins of small circulation. Excellent as such periodicals may be in themselves, their multiplication, for obvious reasons, is at the present time wholly inadvisable.—*Boston Medical and Surgical Journal.*

THE VALUE OF MUNICIPAL LABORATORIES.*

By FRANK PATERSON, M. D., San Jose.

AS NOTHING is of greater importance to the welfare of the inhabitants of a community than its health business, discussion of rational means of placing the same on a scientific and unselfish basis can never be untimely. The duty of carrying out this purpose must be assumed by those qualified by education and position to accomplish it. This involves primarily the physicians of the community. They, acting in concert with the official health body, and with the coöperation of the intelligent portion of the public, which latter, alas for the object, must be too often educated to the purpose, could do much that is not being done toward the eradication and prevention of disease.

However, to the end that the physicians of the community and the health officials might be enabled to more advantageously coöperate in the campaign against disease, and that factors having the most potent influence upon the public health might be investigated scientifically and independent of factional bias, every city of more than 10,000 inhabitants should be equipped with a municipal laboratory and employ the services of an efficient bacteriologist and chemist.

"It is to be regretted that the actual degree of usefulness of such institutions is too often made the shuttle-cock of local political conditions, but this stage can last only so long as the citizens continue to close their eyes to the part that might be played by the laboratory in securing and safeguarding the public health."†

To the matter of proper and thoroughgoing inspection of water, milk and food, sanitary conditions of schools, public buildings and conveyances, etc., the municipal laboratory constitutes an indispensable auxiliary. With more detailed reference to some of these things, it might be said that the water supply and drainage conditions should be subjected to regular and systematic inspection. The reasons for this need no elucidation and the role of the municipal laboratory is equally manifest.

The milk supply and its sources, when correctly controlled, have a direct bearing upon the infant mortality rate. While the laboratory would have in view the bacteriological condition and the detection of chemical adulteration and dilution or extension of the milk, the admittedly more important purpose of protecting the general character of the supply, through control of the dealers and producers, would be more thorough because of its agency. The experience in Eastern cities shows that dealers and producers as a class are rapidly awaking to the merits of scientific method and realization of the value of a certification of purity by competent health inspectors.

Further, in a city where an efficient system for the notification and control of infectious diseases is conducted, the laboratory is an absolute necessity. As nearly all the infectious diseases are most prevalent and most fatal among children at school age, a rigid system of medical inspection of schools is above all desirable. Here, again, the laboratory comes into service.

The acquisition and disbursement of means necessary for the establishment of such an institution should rest with or at least be under the supervision of representatives of a united and organized medical profession. It is a demonstrated fact that communities whose health business is established on a scientific and systematic foundation save annually thousands of dollars now spent in futile, because

unscientific, efforts to arrest disease, to say nothing of the saving of valuable lives and the equally valuable happiness that goes with health.

In truth, the preventable ills are legion, and they impose upon humanity countless evils which, under right education, for the most part should be averted. Preventive medicine must guard the lives and education of the people, particularly the young, so that future generations may not suffer from our neglect of imperative duty.

THE RAT AND HIS PARASITES; HIS ROLE IN THE SPREAD OF DISEASE, WITH SPECIAL REFERENCE TO BUBONIC PLAGUE.

By B. J. LLOYD, M. D., Asst. Surg. U. S. M. H. S.

(Continued from page 116.)

Contact with infected human beings being insufficient to account for the spread of the disease, we have to inquire in what way, then, does man become infected? This much we know: living plague bacilli must be brought in contact with the human body externally or internally, and while such contact does not always produce infection, it is sufficient in many instances. Direct inoculation subcutaneously, even with the slightest abrasion, such as is not infrequently produced by the nails, would, I have no doubt, result in infection in a very large per cent. of cases, even in those who live under the most favorable hygienic conditions. The mere contact of infective material, preferably plague tissue, rubbed on the unbroken skin of the guinea pig, is sufficient to infect in perhaps 90 per cent. of trials, and judging from the number of cases in man which certainly are infected through the skin and which present no cutaneous lesion, I have no doubt that man may be infected in the same way. Without going into details (and you may draw your own conclusions from observation and from the literature of the subject) I wish to state dogmatically that while infection does take place through the respiratory and gastro-intestinal tracts, and perhaps through the genito-urinary tract, *by far the greater number of persons are infected through the skin, either with or without a discoverable cutaneous lesion.* If this be true, then what may be the source of the bacillus and how does it reach the human body? In the pneumonic form, and in those cases where we have a *lymphangitis pestis* in the pulmonary lymphatics, the sputum is of course dangerous. Inasmuch as these cases are not very frequent, we are led to a discussion of "sources other than rats and human cases," rats being reserved for a separate consideration. I use the word source to mean any animal that may harbor the germ, or any material outside of the animal body that may contain living plague bacilli. The evidence here is very conflicting. Competent observers say that cats have the disease but do not die of it. Lorans in Mauritius

* Read before the Santa Clara County Society.

† Dr. Geo. M. Gould, in *American Medicine*.

states that in several cases he traced the infection in human beings to plague-stricken cats. These cats had discharging cervical buboes in which plague bacilli were found. The Australian authorities have reported one instance of a cat suffering from the disease. The Austrian Plague Commission succeeded in infecting three cats by feeding, and these all developed cervical buboes. Di Mattei points out that the excrement of such cats is infectious. I have no doubt that these observations are true, but it has not been demonstrated that cats are infected with sufficient frequency to be of very much importance, though it is just as well to remember these facts in dealing with plague. In one experiment I failed to infect a cat by feeding; but as to that matter, feeding experiments often fail in rats, which are highly susceptible. Dr. Boido states that dogs died of the disease in the recent outbreak in Mazatlan, and Yersin says that he has known dogs to die from biting infected rats. I know of one dog that did not die from such performance, though on the second day afterwards he was not feeling very well, but here again negative results do not mean anything. The Austrian Plague Commission states that the excrement of infected dogs is dangerous, and it seems to me that we cannot altogether ignore the dog. It is well known that monkeys are susceptible to pest infection, and they probably contract the disease in the same way that human beings do.

Various other domestic animals have been reported as suffering from or at least harboring the germs, but the evidence is not so conclusive. The following is from the *Journal of Tropical Medicine*:

It is with much satisfaction we see that the Hong Kong medical authorities are following up the conclusions arrived at by Professor Simpson as a result of his experiments and investigations into the causes of plague in Hong Kong, and that ample confirmation of these views is being obtained. The experiments demonstrated that pigs, calves, buffaloes, sheep, hens, ducks, geese, turkeys and pigeons were, in addition to rats, susceptible to plague, and particularly so when fed with plague material. * * * It appears that on May 31st one fowl was sent from the Western Market to the Public Mortuary, and on examination by the bacteriologist it was found to have died of plague. On June 1st a duck was sent and was also found to have died of plague. On June 2nd four ducks from the same market and one chicken were reported to have died of plague, and on June 3rd a quail was found to have died of plague. * * * Pigeons succumb to the disease.

The most improbable part of this story is the allegation that pigeons succumb to the disease. Bacteriologists the world over are practically a unit in attributing to the pigeon an unvarying immunity. In two experiments I inoculated pigeons with large quantities of a virulent bouillon culture, and after five and ten days respectively, I was unable to obtain the bacillus from any part of the body. Of the many pigeons I have

seen inoculated for the purpose of differentiating the bacillus pestis from the bacillus of chicken cholera (and this is just one of the several ways in which they differ), I have never seen one suffer the slightest inconvenience from inoculation with pest. References to domestic fowls in connection with plague are not infrequent in the works of older writers. Skene, in his Edinburgh essay on plague in 1568, says: "If the domesticall fowls become pestilential, it is ane signe of maist dangerous pest to follow." Creighton thinks that this observation has been borne out by more modern experience in Yun-nan. It may be possible that at the height of an epidemic of plague an increased virulence of the bacillus pestis, whatever an increase in virulence may mean, does enable it to become pathogenic for most of the domestic animals. At other times, the virulence of the bacillus may be so lowered that it will not produce the disease with such readiness, if at all, as it is well known that experimentally, at least, the virulence may be so lowered that it will not even kill mice, the most susceptible of all animals. If it is true that domestic animals under certain conditions harbor the germs and transmit them to man without the animal itself becoming ill, we can readily see that this is a matter of the utmost importance, as there is nothing so deadly as an enemy in ambush. The subject is one that will bear further investigation. A clipping from the *New York Sun*, purporting to be from the same source as the article from the *Journal of Tropical Medicine*, read as follows:

London, Oct. 17.—The recurrence of the bubonic plague every spring at Hong Kong, and the fact of its breaking out simultaneously at two or three unconnected neighborhoods, led Sir Henry Blake, the governor of the colony, to make experiments with the object of discovering the source of the disease.

A block of native houses containing several thousand inhabitants, which was certified as being free of plague, was selected for examination of vermin as the first step. The result was startling. Fleas, cockroaches and spiders were found to be unmistakably infected with the germs of the plague. The bite of these insects is sufficient to introduce the germ. A further test revealed a more disturbing source of infection in samples of blood taken from healthy inhabitants which were forwarded to the bacteriological department. Plague germs were discovered in at least 5 per cent. of these samples. Thus, in the hot season, each of these was a probable center of danger, although there was no apparent contact with the disease. The only cure seems to be the destruction of the native town and the erection of a new and clean one which can be kept under sanitary control.

Although the statement regarding the isolation of plague bacilli from the blood of healthy individuals seems almost absurd, or at least highly improbable, it is hinted at by one other English author whose statement is at least worthy of consideration. Thomson, from whose work I have already quoted liberally, in his "Treatise on Plague," says:

Let no one rashly conclude that any suspect is not a plague case because the temperature is normal and he has no bubo. A few cases have been recorded of plague appearing in the form of buboes without any constitutional affection. Plague cases vary very much in severity, and some are so mild that it is only by the appearance of a bubo that one can know the patient is attacked by this specific disease. In mild cases the diagnosis can only be made by the discovery of an inflamed and perhaps only slightly enlarged lymphatic gland, and by a bacteriological examination microscopically and by cultivation of the extracted matter from this gland.

It has been many times noted that medical men and other attendants on plague patients occasionally suffer from headache, malaise, anorexia and an inflamed or tender lymphatic gland at times, without being at all further inconvenienced or developing symptoms of plague such as are clinically met with. The case of the sweeper at Parel Hospital is an instance in point, and since then two fresh instances of a similar transient character have come to notice. Here the vital resistance of the healthy organism has been capable of resisting the inroads of the microbe. As in tuberculosis, it is known the microbes are very generally diffused and yet general infection of the whole populace does not follow. So in a plague epidemic it is scarcely possible that the germs are entirely absent from all dwellings in which plague cases do not occur. Free dilution with pure air seems to kill the plague germ readily.

What has been said of fleas and mosquitos will apply to flies and other vermin. Fomites have long been regarded as a source of transmission, and with apparent good reason. The theory that the plague bacillus has a saprophytic existence in the soil may be mentioned as a possibility.

We now come to the consideration of the rat in particular as a means of disseminating the germs of plague. The question often asked by sanitarians is, not whether the rat is concerned in the spread of the disease, but is he the only agency. It has already been shown that the disease may be transmitted in other ways. We have now to make out a case against the rat, and there should be no difficulty in convicting him as principal, the others being accessories. It is admitted that we are unable to state satisfactorily the way in which the germ passes from rat to man. If I should shoot a man in the street in the presence of credible witnesses, I do not think a jury would acquit me because they did not see the bullet enter his body. Competent evidence can be introduced to establish the following facts regarding rats and plague: Rat plague and human plague are identical. The spread of plague follows along the lines of migration of the rat, and not necessarily along the lines of travel of human beings unless rats accompany them, as on board ship. Plague produces a greater mortality among rats than among human beings. Plague almost invariably attacks the rats of a city before it appears in human beings. The first cases of plague in a city nearly always occur in a vicinity where infected rats have been found

(To be concluded next month.)

DIED.

Dr. Charlotte Blake Brown, the pioneer woman physician of California, died in San Francisco on April 19, at the age of 57. She began the study of medicine with her brother, Dr. Charles Blake of San Francisco, and later completed her course in the Woman's Medical College of Philadelphia, returning here to practice. The Children's Hospital was organized by her, and for twenty years she was physician and surgeon there. Many of the local associations to relieve suffering humanity were planned and organized by Dr. Brown, who was the first woman here to practice surgery. She was one of the organizers of the Home for Feeble-Minded Children and the Associated Charities, and was an active worker for the bringing into existence of a State Board of Charities. She proposed the establishment of a training school for nurses, and has always opened the way for women where her own ability placed her in the lead. Dr. Brown was born in Philadelphia. She leaves a husband, Henry Adams Brown, three children, Dr. Adelaide Brown and Dr. Philip King Brown of this city, and Mrs. Harriet Darling of Brookline, Mass.

"LITERATURE."

Dr. Swan of New Haven relates that a professor in one of the larger universities collected the pieces of literature relating to "proprietarys" received during one year, and that they amounted to 424 separate items. Of this number only 54 could be classed as respectable, while the remaining 370 pieces related to remedies more or less secret in preparation, supported by weak journal articles, physicians' testimonials and commendations by the makers. This last class was supported by the testimonials of 1,780 physicians, 56 editors of ten-cent medical journals and 119 professors in mushroom medical schools.—(Bayley, in *N. Y. State Journal of Medicine*.)

PRESCRIBE INTELLIGENTLY.

Clinical experience has ever taught that it is wise to prescribe as few remedies as possible and to use no powerful drug without a distinct idea of what it is intended to do, and that to get the best effects from such a drug it should usually be given by itself. There is good reason to fear that today there is too frequent violation of this rule—due, perhaps, as much to carelessness as to a lack of knowledge.—(Purdy, in *N. Y. State Journal of Medicine*.)

GOOD COURSES AT SUMMER SESSION.

The summer school of the University of California will be in session from June 27th to August 6th, when some courses of interest to the medical profession will be given. Prof. S. A. Arrhenius, University of Stockholm, will give, in English, a course on the application of physical chemistry to serumtherapy, which will include his most recent and unpublished conclusions. Prof. William Ramsay, of London, will deliver a series of lectures on the recent developments in chemistry, illustrated by experiments on the behavior and properties of radium.

Plague case No. 119, bacteriologically confirmed, occurred at Concord, Contra Costa County, February 24. The patient was an Irish-American woman, age 39, and died February 29. The occurrence of the suspected disease was promptly reported, and at once investigated by Dr. B. J. Lloyd, P. H. and M. H. S. Every assistance was given by the attending physician, Dr. Neff, and by the local authorities.

Erratum—On page 122, April JOURNAL, seven lines from bottom of first column, the word "filling" should read "freeing."

SOME RECENT ADVANCES AND INVESTIGATIONS IN RHINOLOGY AND OTOTOLOGY.*

By LOUIS C. DEANE, M. D., San Francisco, Cal.

THE past year has been productive of some advances, in no way startling, it is true, but no less convincing, that there are a few, who, though taken up with the busy round of routine practice, still have the time and the patience to step forward and advance into new fields. It also takes courage, for who is there among us who does not look skeptically upon new advanced theories and methods, willing to brand the author who has the courage to stand his ground, as an extremist or a crank.

To Dr. Otto Freer (1) of Chicago, who, with his twenty-four personally devised instruments, desects up membranous flaps and resects large pieces of cartilage to correct septal deviations, we must pay our respects for his mature and possibly advanced technique. We may refrain from practicing his methods, fearing our own ability to work from one to two hours upon a deflected septum; not to speak of the courage and fortitude required by the patient. Still, the question as to the best method to employ for the correction of a deflected septum is a much discussed one. I have read with care the elaboration of a number of these methods. I have tried several but have invariably fallen back upon the rough and ready Asch operation as applicable to the greatest number of cases.

One drawback to the successful outcome of many operations is that while the cartilage of the septum has, through surgical interference, been replaced towards the median line, the anchors which largely held it in its deflected position remain intact; I mean its attachment to the perpendicular plate of the ethmoid, the vomer and the superior maxillary spine. These resist the pressure exerted by the splints and assist later in drawing the septum into its old and deflected position.

It has been my habit to attempt during the Asch operation to sever the attachment between the septum and the maxillary spine by fracture with crushing forceps. Beaman Douglass (2) of New York, has recently suggested a more technical method of obtaining this result by an incision under the upper lip, to the side of the raphe, and then with chisel and hammer detaching the spine from the floor of the nose. I have only had an opportunity to practice this method once, and while some difficulties of manipulation were encountered, I was able to push the septum over without resorting to any operation upon the triangular cartilage itself.

I cannot pass without mention of the treatment of atrophic rhinitis by the use of paraffine injections into the tissue covering the turbinate bodies. Broeckaert (3) speaks most favorably of this method and states without reserve that the time is approaching when we will count ozena as one of the curable diseases. The injection of paraffine seems to act first, mechanically, by reducing the size of the nasal cavity. Later the paraffine becomes permeated by young cells with the subsequent development of connective tissue. The epithellum takes on an active part in this regeneration, and the degenerated glands, so numerous in the atrophic mucous membrane, disappear; which explains the lessening of the secretion and odor.

The local and internal administration of Mucin is highly recommended by Wyle, Low (4), Stuart (4), Ambercrombie, and others. It comes in the form of tabloids which, when mixed with lime water and

sterilized water, is applied in the nose. The tabloids may also be taken internally. Let us hope that more may be heard from this, apparently valuable, new remedy.

Hay fever is of such rare occurrence on the Pacific Coast that it is unlikely that any of us will have much opportunity to use Professor Dunbar's (5) antitoxin. It is in line with the rapid strides which are being made in serum therapy and when such authorities as Sir Felix Semon (6), Emile Mayer (7), and McBride (8) report favorably upon its action, it is to be hoped that, in the coming year, we may be able to speak of it as a reliable remedy, a relief for the distressing symptoms accompanying hay fever.

The natural trend of operations upon the sinuses is the formation of formidable openings with radical surgical procedure; this is especially so of chronic inflammations involving the maxillary sinus. The efforts at seeking and irrigating through the natural orifices, the attempts at treating through an opening in the alveola process, or one made by Krause's curved canula from the inferior meatus, have been more or less abandoned for large openings through the canine fossa and lateral walls of the inferior and middle meatuses, as recommended and practiced by Onodi (9), Rethi (10), Luc (11), Curtis (12), Picque (13), Taurbet (13), and others.

While there are some who hold that in the electric bougie we have found a valuable remedy for stricture of the eustachian tube and diseases dependent thereon, prominent among whom is Dr. Ducl of New York, I might say that its application is not easy, requiring some skill for the proper introduction of the bougie. When added to this fact it is noted that the first few attempts may not be followed by encouraging results, I am convinced that many who have tried this form of treatment have become disheartened. It certainly has its indications and is of unquestioned value in strictures of the eustachian tube, especially when due to a soft exudate near the isthmus. From my own experience with it, during the past three years, I can but conclude that its application, in osteo-sclerotic and catarrhal diseases of the middle ear, is useless.

To bar from serious consideration the treatment of chronic non-suppurative middle ear diseases by hot air, injected into the external auditory canal, would be to overlook one more method for the application of heat to the inflamed surfaces. Aside from the marvelous effect of dionin (ethyl-morphin hydrochlorate) upon the lymphatics of the eye, heat is the best lymphagogue we have, and one cannot but appreciate the logic of such an application. The use of heat in chronic forms of inflammation is already well established, as is shown by its marvelous effect upon chronic diseases of the joints, etc. As to its application in the ear, most of those who have used it report favorable results, especially its effect upon tinnitus; all suggest, though, the necessity for a course of continuous treatments extending over a number of months, which is often impracticable, but to be expected in chronic hyperplastic conditions. I believe we are justified in looking forward to improvement in its method of application. We are at present unable to determine the temperature of the air as it comes in contact with the drum and adjacent ossicles, or to accurately gauge it. It reminds one of the application of electricity without the use of a milliamperemeter.

During the past year, J. L. Goldstein (14), and especially R. Levy (15), and W. Milligan (16), have made extensive studies in the cause, effect and treatment of tuberculosis of the middle ear. Levy reports extensive researches and enumerates his conclusions upon this interesting, and I believe much overlooked,

*Read by title before the American Rhinological, Otological and Laryngological Society, S. F., Feb. 27, 1904.

malady of the middle ear. Milligan points out that the objective symptoms are referable to the effects produced by the deposition of bacilli within the mucosa of the tympanic cavity and to the subsequent ulcerative effects which are hereby induced. Miliary tubercles are deposited in the superficial layers of the mucosa, which appear as yellowish areas in a pearly gray membrane. They readily break down, forming ulcers, which produce extensive destruction.

Kocner's efforts at entering the attic and antrum through the external auditory canal cannot help but arouse our interest. The day may be near, with our increasing knowledge of these parts and improved technic, when this operation will not be considered as ill advised to avoid under certain conditions the more radical and disfiguring procedure against the mastoid cells. Its analogy to vaginal hysterectomy and ovariectomy is interesting.

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TENTH INTERNATIONAL CONGRESS OF OPHTHALMOLOGY.

The date of the next congress has been advanced a few days, in compliance with general request, and has now been fixed for the 14th, 15th, 16th and 17th of September, at Lucerne. The latest date for receiving manuscripts has been fixed at May 1st. Professor Pfluger died since the first circular was sent out, and Professor Siegrist, his successor at the University of Berne, has been appointed in his place. "Those colleagues wishing to secure accommodation at Lucerne beforehand, are advised to apply before the first of September to Dr. F. Stocker, president of the local Committee at Lucerne. He will engage for them a room at one of the best hotels (early breakfast included), at five francs a day each person."

The American Neurological Association has fixed the time of its meeting at St. Louis for September 15, 16, and 17; and this will be immediately followed by the sessions of the various medical departments of the Congress of Arts and Sciences, beginning September 19.

"Torticollis and Spinal Curvature Due to Eye-Strain," in which several interesting cases are reported, is the title of a paper by Dr. Geo. Gould in *American Medicine*.

Death From Wood Alcohol. "Mrs. Lillie Sullivan, of Baltimore, died as the result of drinking Jamaica ginger prepared with wood alcohol."—*Pharmaceutical Era*. At first blush one is tempted to condemn the dishonest manufacturer who uses wood alcohol in making his ginger. But this seems a hopeless task, so one had best condemn the poor woman who drank the concoction with such dire results.

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IMPORTANT NOTICE I

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

JUNE, 1904.

EDITORIAL NOTES.

The secretary has already sent a letter to the secretary of each component society, giving notice of the action of the House of Delegates at the last meeting, on the matter of assessment for the year April 24, 1903, to April 21, 1904, be fixed at one dollar (\$1) per member. Carried." Under the new constitution it became the duty of the House of Delegates to fix the amount of this assessment, and they did so at the second session, Wednesday, April 20, 1904, making the assessment for the year April 21, 1904, to April 20, 1905, two dollars (\$2) per member, thus increasing it over previous years. By resolution, unanimously carried, they also made one-half of this amount payable on or before July 1, 1904, and the balance payable on or before April 1, 1905. The reason for this action is simple. In order to build up the publications and make them eventually self-supporting, they must have advertising; in order to get this advertising, an advertising solicitor must be paid a commission on his work. The Register will be brought out about the middle of September, and the money must be available for paying commissions on the advertising secured *as it is turned in*

—that is, in June and July. All commissions are payable when the contracts are *accepted*, and *not*, as many suppose, when they are *paid for*. The State Society was giving too much for the money. The dues, even at \$2, are the lowest of any State Society in the country, so far as we are aware. This was agreed to, unanimously, by the delegates. County society secretaries should take this matter up at once and have a remittance for the amount (\$1 per member; one-half the assessment for the year ending April 20, 1905) sent to the office of the State Society as soon as possible. Work has already begun on the next edition of the Register, and contracts for advertising are now being brought in. Please do not delay in attending to the matter of this modest assessment.

At the Paso Robles meeting of the State Society the new Constitution and By-Laws, practically as recommended and with only minor alterations—mostly of phraseology—was adopted. This action is exceedingly important, for many reasons. The word "regular" was stricken from the document, and the personnel of the membership in county societies is placed absolutely in the hands of each county society. Every legally qualified practitioner of medicine who does not claim to practice any "pathy," should be eligible to membership. This does not mean that every county society must elect every physician, regular, homeopathic or eclectic, to membership. It simply means that each society shall judge for itself. Each component society should now take similar action and see that the word "regular" is dropped out of its organic law. If, then, two-thirds of the members in any county society wish to elect a legally qualified physician who does not claim to practice any special school of medicine, but whose license to practice is based upon a homeopathic or an eclectic degree, they may do so. The actual facts involved are broad and plain, easily understood and not liable to misconstruction. Hair-splitting, as an active pastime, should be relegated to the "calomel and jalap" days of the past, or the time of the millionth dilution.

We have recently received a letter from Dr. Van Zwalenburg, of Riverside, giving some information as to the hotel accommodations at the New Glenwood Hotel, Riverside, which was chosen as the place for the next meeting of the State Society. He states that at the time of our meeting at Paso Robles the New Glenwood Hotel could have accommodated 325 additional guests, one in a room, or 400 additional, two in a room where possible. The rates next year

will be \$2.50 per day for room without bath, and \$3 for room with bath; meals included. In addition to the accommodations at this hotel, other near-by hotels could have accommodated guests to the extent of some 200. It would appear from this showing that there will be ample and comfortable accommodations for from 500 to 600 members, and we sincerely trust that such accommodations will be entirely taken up. At the last meeting there were 128 members registered, and probably from 25 to 50 who did not register. With the friends and relatives of those in attendance, it is safe to say that there were at least 225 people at the meeting. Had there been ample accommodations, the number would undoubtedly have passed the 300 mark. Next year we should have at least 300, and there ought to be even more. The physicians of Riverside have already commenced their arrangements for the meeting, and the Committee on Program has outlined its work for the year and will almost at once begin active work upon the program. Everything promises for a far bigger and better meeting than the Society has ever before held.

The "newer materia medica," largely composed of synthetics and coal-tar derivatives, is both an interesting and a staggering problem. **SYNTHETIC** Many men of excellent judgment and **REMEDIES.** cool, far-seeing calculation, have expressed the opinion that these newer chemicals are the materia medica of the future, and that their introduction and use will go far toward making of medicine a more exact science. This may or may not be true. Unfortunately, time in large doses is required to determine the exact status of any remedy; to develop its peculiarities and eccentricities, its anomalies and idiosyncrasies. The chemistry of the last fifty years has busied itself very largely with the problems of synthesis, and the results have been truly astounding. If a chemical produced in the laboratory of man has the identical characteristics and physical properties of the product of nature's laboratory, it would seem to follow that it should have the same therapeutic action. Every argument of analogy and reason would indicate the identity of the two; yet there are clinical observers who claim inequality of therapeutic action. Are these claims based upon sound reason or upon prejudice; upon fact or fancy? The very great value of some of these newer chemicals cannot be disputed, though it is to be deplored that they are so absolutely controlled and owned by individual houses as to identify their recommendation with the commercial exploitation of business enterprise. While this is, in itself, antagonistic to one of the most deeply rooted principles of medical ethics, it remains a still more profound fact that the physi-

cian's first and paramount duty is to his patient, and that thing which will help his patient most is the thing which he should use. This, of course, is said only of definite chemicals; it goes without saying that he cannot tell whether any remedy the composition of which he does not know, will help or harm his patient; hence such should never be used under any circumstances.

We, in the West, are greatly favored of Divine Providence in many ways. We are not quite so narrow-minded and hide-bound as some of our friends and professional relatives in the East, where, especially in New York, harmonious organization has been prevented for a number of years largely through the small and narrow-minded intellect of a few men. (That "few" is really poetic license; there are more than a "few.") When, at last, the condition of warfare due to hair-splitting extraordinary, and personal jealousy paramount, could no longer be tolerated by the majority, and amalgamation was forced, there only remained some of the journals of peculiar insignificance to mourn the coming of peace. That medical "bloody shirt," the code of ethics, now but a shred of its sometime self, is flaunted by the *Post Graduate* for April. It also takes exception to the *Association Journal* and quite approves of the silly stuff supposed to be "editorial" argument printed by the *Buffalo Medical Journal*, and commented on in our April issue. The *Post Graduate* thinks that the large medical weeklies will be willing to print all the "good papers," and perhaps all the papers (evidently they are not all "good," even in New York!), and then at the end of the year the moss-covered volume of "annual transactions" will be sent to each member. But if the papers—or at least the "good papers"—have been already printed, why go to the expense of issuing the volume? Nobody wants the papers that are not good. The poor old ostrich-like *Post Graduate* can see no use for a large organization, nor for a "great and permanent political and literary machine." A "permanent political machine" is just what a large number of physicians in this country, represented in the A. M. A., is striving heart and soul to bring about. The *Post Graduate* seems to think the whole movement of organization is the result of the attempt on the part of the secretary and editor of the *A. M. A. Journal*, and the editor of the *N. Y. Association Journal*, to continue themselves in salaried positions. Unless things have materially changed in New York, very recently, the editor of the *Association Journal* does not get enough salary to buy postage stamps with. It seems to take some people a very long time to discover that "the world do move."

The *Ladies' Home Journal*, for May, publishes a table giving the percentage of alcohol contained in a number of the more common so-called "patent medicines," or **ALCOHOL IN** nostrums, taken from the Massachusetts State Board Analyst. This **NOSTRUMS.** we print on page 185. The editor of the *Journal* gives a scathing rebuke to the old Women's Christian Temperance Union and to most of the theologic press for permitting the wholesale consumption and advertising of these murderous compounds. There is probably not a single doctor in the land who does not know of at least one person who is ignorantly or innocently consuming more or less alcohol through the medium of one or another of these deadly compounds. Is it not our positive duty to warn our patients or our friends of what they are doing? Of the fact that they are simply cultivating the liquor habit? Think of the pregnant woman, or the young mother nursing her child, who is at the same time submitting that innocent child to the influence of large quantities of alcohol, taken in the bottles and bottles of this stuff? How many thousands of women are ruining themselves and their homes by taking to alcohol through the medium of Lydia Pinkham's Vegetable Compound (alcohol), or Hood's Sarsaparilla (alcohol), or Peruna (alcohol). This table we have had printed on slips and these will be furnished to any physician or pharmacist in the state who will ask for them. They can be handed, with or without comment, to any one who you know is a victim of the nostrum habit. Drop a line to the *JOURNAL* office and we will send you some of these slips, which you can give to your patients. It is your plain duty as a man and a physician to do all that you can to put a stop to this traffic in life and honor.

The Medical Society of the State of California publishes the only official Register and Directory of physicians in California, once a year. The State **UNAUTHORIZED** Society has nothing to do with any other "directory" or "register," does not aid or countenance the publication of any such things, and desires particularly to warn the members of the Society and the advertisers in the Society's publications against any possible misunderstanding. We make this statement for the reason that certain statements have come to our knowledge which, to say the least, are misleading. There are at least two alleged "directories" of physicians in course of preparation at the present time. One of these proposes to confine itself to members of the Society, and to publish the photograph of each member; whether for a consideration or not, we do not know. Please do not for a moment be lead into

believing that the Society has anything to do with these ventures, or approves or countenances them. All the business of the Society is done *through the publication office*, and under the direct control of the Council; no commercial or publication house has anything whatever to do with the official publications of the Society. There may be errors in our official register, but in comparison with any of the alleged "directories" which have come to our notice, it is a lasting monument of absolute perfection!

Digitalis—or rather the commercial preparations of the drug—have been found wanting by a member of the Society, whose communication on the subject will be found on page 184. The *JOURNAL* wishes to call particular attention to this matter and ask that those who have had experience, clinically, with digitalis in one or more of its commercial preparations, will be good enough to advise us of the result noted from such use. Many times has question arisen as to the value or worthlessness of the average tincture or fluid extract of digitalis. The writer of the letter in question does not underestimate the importance of the matter; it may mean life or death to the patient. The opinion which he expresses is one held by many physicians of experience, but we should like very much to hear from members of the Society specifically. The fault may be with the crude drug, with the manufacturer or with the dispenser, if fault there be. But if, in the opinion of those who have had much experience with these preparations, they are unreliable, then indeed we should know it, and as soon as possible. Please communicate your views to the *JOURNAL* for the benefit of your fellow-members in the Society.

At the May meeting of the San Francisco County Medical Society, amendments to the constitution and by-laws of the society were introduced, which, if **THE REVISED** they are adopted, will bring the **CONSTITUTION.** law of the county society into line with that recently adopted by the State Society. The word "regular" is eliminated from the document in question. The proposed amendments will be found published elsewhere in the *JOURNAL* and should receive the careful attention of all members of all county societies. The method of election is peculiar to this county society and was adopted several years ago for numerous reasons. All county societies now have the privilege of electing to membership any legally qualified physician who does not practice nor claim to practice, nor advertise himself as being connected with any special and particular school of medicine.

THE ACTIVE PRINCIPLE OF THE ADRENAL GLAND:

WHAT NAME SHALL BE GIVEN TO IT?

By PHILIP MILLS JONES, M. D.

THIS is a calm, unbiased, unprejudiced presentation of one of the gravest problems and most vexatious difficulties confronting the conscientious medical editor who wishes to do right by all concerned and show particular favoritism to none. It is my sincere and earnest wish that it may be so construed, and no ulterior motive interjected into a matter where none properly belongs.

On account of the very important place in medicine and surgery which the active principle of the adrenal gland took immediately upon its presentation to the medical profession, it offers an illustration of the questions at issue which will, I think, bring them immediately home to every physician. They are profound questions and will have to be met and solved, some day, by the medical profession of this country. To many of us it appears as though that day had arrived.

The suprarenal gland has been the subject of investigation by chemists of the first rank since 1859, when Vulpian offered the first contribution to the subject. In this country the gentlemen principally identified with these investigations are Takamine and Abel. Takamine first discovered that the active principle could be precipitated from a concentrated solution of the glandular tissue by ammonia. He named his crystalline active principle Adrenalin. The process was patented and the name trade-marked, and is now the property of Parke, Davis & Co. Prof. Abel has named the active principle Epinephrin, and the ordinary solution, epinephrin hydrate. As the name (Epinephrin) is not trade-marked, but is free to science and commerce, it is here used to define the active principle in question. The reasons for using this name rather than any other will later appear.

The exact chemical formula of this active principle has been the subject of considerable controversy between Abel, Crawford, and others on the one side, and Takamine and Aldrich and their followers on the other. The former give the probable formula as $C_{11}H_{13}NO_3$ (epinephrin), and $C_{11}H_{13}NO_3 \cdot 12H_2O$ epinephrin hydrate; the latter give the probable formula as $C_{11}H_{13}NO_3$, adrenalin. Recently Jowett, in *Proc. of the British Chem. Soc.*, reports a confirmation of the last named formula. Be the fact as it may, there is agreement amongst these gentlemen as to what they have found, and disagreement only as to its exact chemical formula. They may all be wrong, for subsequent investigation may show that more than one substance is represented in the thing known as epinephrin.

The process employed by Abel for isolating the crystalline active principle which he has named epinephrin does not appear to infringe the patent rights taken out by Takamine and now held by Parke, Davis & Co.; nor does it appear to have been patented. Several manufacturers in this country have availed themselves of the method of Abel and have placed upon the market preparations of epinephrin, each under a distinct and trade-marked name. Thus, Frederick Stearns & Co. have placed upon the market Adnephrine (formerly called Adrenol); Armour & Co. have marketed Suprarenalin; more recently, the H. K. Mulford Co. have called attention to their preparation of the same substance, Adrin. Each of these houses claims that its product is the identical active principle

of the adrenal gland (named epinephrin); yet each claims superior advantages for its own preparation. Furthermore, the name used by each house is controlled through registration as a trade-mark, by that particular house, and can be used by no other person or manufacturer.

This state of things produces a result that is most exasperating. If a physician recommends adrenalin or adrin, he is commending *not* the active principle of the adrenal gland—epinephrin—but *that particular brand* of this chemical which is made, owned and controlled, in the one case by Parke, Davis & Co., and in the other by the H. K. Mulford Co. Nature makes, in the gland, epinephrin (a word that nobody owns; a word free for anyone to use); but only Parke, Davis & Co. can make adrenalin, and only the H. K. Mulford Co. can make adrin. All concerned agree that the thing itself is, in each case, the same thing, whether the actual formula of the chemical is represented by 9 atoms of carbon, as claimed by Takamine, or 10 atoms of carbon, as supported by Abel, or whether it is extracted after the process of Takamine, or by the method of Abel.

All physicians are not, intentionally, going through life advertising the preparations of any one particular house nor exploiting that house as against others. Yet that is exactly what the physician referred to does when he commends the product in question under its trade-marked name. What he *means* to say is that he recommends the employment of the active principle of the adrenal gland—the product of nature—epinephrin. The claim has been made repeatedly that priority of introduction should entitle that particular house to the general use of the name which it gives to the thing introduced. This claim would be granted at once if such name was not covered by trade-mark and thus excluded from free use in science and art and commerce. *Any one* may make epinephrin after the method of Abel; but *no one* can make adnephrin or adrin, which are really only two brands of the same identical thing, except the houses of Frederick Stearns & Co., or the H. K. Mulford Co., respectively.

The unfortunate condition of which this is but an illustration is brought still more emphatically home to us for the reason that every one of the houses manufacturing preparations of epinephrin, so far as I am aware, is of the first rank in pharmaceutical manufacturing. Undoubtedly all of these preparations are well and carefully made and reliable, and I can see no reason for specifying any particular brand, other than friendship for the particular house making it, or agreement with the claim that priority of introduction should receive recognition. But, as various physicians will specify or write for all of these various preparations, the poor pharmacist finds himself in the uncomfortable position of being obliged to carry in stock six or eight probably identical preparations. It is obvious that he is thus compelled to invest six or eight times as much money as is really necessary, if it be admitted that all of these preparations are merely brands of the same thing—epinephrin, the active principle of the suprarenal gland.

This condition of things is becoming every year more intolerable, especially to such medical editors as are conscientious in the discharge of their duty, and, soon or late, it will be corrected. The plan which I have advocated in season and out, for the past two years, offers a solution of the difficulty at once practicable and satisfactory. The establishment of a National Bureau of Medicines and Foods would secure the adoption of names free to commerce and to science, while at the same time offer every possible protection to capital invested in honest, legitimate pharmaceutical enterprises.

SCURVY IN INFANTS.*

By WILLIAM FITCH CHENEY, M. D.,

Professor of Principles and Practice of Medicine, Cooper Medical College, and Physician to Lane Hospital, San Francisco.

I HAVE recently seen in consultation two very similar cases of disease in infants; yet in each case the physician in charge frankly stated that the symptoms were new to him, and that he did not know how to interpret them. Having seen a number of such cases before, and feeling sure that the condition is a not uncommon one, I am prompted to call the attention of the profession once more to scurvy as it occurs in infants. My recent cases were as follows:

Case No. 1. Seen in consultation in Menlo Park, January 9, 1904; a male infant, aged 8 months. For several weeks the baby's appetite had been failing and he had been growing more and more restless and sleepless. Several times during these weeks his napkin had been stained with blood passed with the urine. Recently great tenderness had been noticed about both lower limbs, so that he screamed when raised or handled, or especially when his limbs were elevated to change his napkin. Finally, a few days previous to my visit it was observed that the gums about his two upper incisor teeth were swollen so as to nearly hide the teeth, were dark purple in color and bled when touched.

Case No. 2. Seen in consultation in Alameda, February 3, 1904; a male infant, aged 13 months. This baby, so the mother said, cried violently whenever his legs were moved, as in putting on his shoes and stockings or changing his napkin, and had done so for eight or ten weeks before I saw him. He had gradually grown worse in this regard, so that now he would no longer sit up and could not lie in any position for any length of time without crying from pain. The mother knew of no cause, and the baby had been treated for a long time for rheumatism. He screamed violently when his legs were examined; both were found swollen from the knees down, markedly about the ankles and feet. The baby was found to have four teeth—two upper and two lower incisors; the gums about these were much swollen, so that the teeth were nearly hidden, were dark purple in color and bled when touched.

In each of these cases the symptoms meant scurvy and could mean nothing else. I observed my first case of this sort in July, 1895, and reported it in the *Medical News*, February 29th, 1896, this case being, so far as I am aware, the first one reported from the Pacific Coast. Subsequently a collective investigation of the subject was made by the American Pediatric Society at its annual meeting in 1898; and to this report I contributed the history of three cases observed to that date. Including the two cases herewith reported, I have now seen ten cases of scurvy in infants.

Etiology: The disease occurs mainly during the first year of life. It seems to be dependent in some way upon the food given; but it occurs in infants fed on many different kinds of foods, and does not occur in all infants fed on such foods. Most often infants who develop scurvy are taking some one of the proprietary foods. In my own cases, Mellin's food, Eschsch's food, Horlick's malted milk and condensed milk have been the foods taken at the time the scurvy developed. But I have the records of many other infants, fed on exactly similar formulæ, who never developed any sign of scurvy. No one has ever satisfactorily explained how the diet causes the symptoms, or what the substance is that by its presence in or absence from the diet might lead to the pathological changes observed. In other words, the exact cause of scurvy in infants is still unknown.

Symptoms: These are quite characteristic and diagnostic. The most important are (1) *Pain on movement of the lower limbs:* Such movement, whether voluntary or due to handling, causes the infant to scream with pain; as a consequence the limbs are not used and they appear paralyzed; frequently, but not necessarily, the thighs or legs are swollen and brawny to the touch; more often along the shaft of the bone than at the joint. All of these symptoms are due to a greater or less degree of

subperiosteal hemorrhage. (2) *Purple Swollen Gums:* This symptom occurs most often in infants that have teeth through the gum or about to appear, and involves only the gum about such teeth. It has been observed in gums that had no teeth through them; but not so often. The gum is so swollen as almost to bury the teeth, is usually dark purple, almost black in color, is spongy and softened and bleeds easily. (3) *Subcutaneous hemorrhages:* These resemble bruises or "black and blue" marks. In the first case I ever saw, in 1895, the infant had a typical "black eye." In another there was a large purple area over the buttock and thigh as if the baby had been beaten. Such spots may appear in any part of the body, and usually take the form of good-sized patches rather than of diffusely scattered purpuric spots. (4) *Hemorrhage from mucous membranes:* This may be from the mouth or throat; from the nose; from the bowel; or from the bladder—bloody urine had been one of the alarming symptoms in case No. 1. herewith reported. (5) *Anemia and malnutrition* are usually complicating conditions, but in no way peculiar to scurvy.

Diagnosis: Given an infant six months to a year old; a history that the legs are tender and the baby screams when they are moved—scurvy is always the most likely explanation. If on examination the gums are found swollen, discolored and bleeding; or if black and blue marks are discovered or have previously been seen by the mother on the baby's body, the diagnosis may be made with almost absolute certainty, especially if the infant is and has been for some time fed on one of the proprietary foods.

Differential diagnosis: The most frequent mistake made is to call the case *rheumatism*. It can not be impressed too often or too strongly that young infants do not have rheumatism—at least it is so extremely rare that practically it may be left out of account; while scurvy, on the contrary, is not at all an uncommon ailment in the first year of life. The disinclination of the infant to use the limbs now and then leads to an erroneous diagnosis of *paralysis*; but paralysis never gives rise to pain and tenderness of the limbs as scurvy does; an examination will show that the loss of power is apparent rather than real. The condition of the gums described should always make the observer suspicious of scurvy; but I have once seen a case where the gums had been lanced, because their swollen, purple state was supposed to be due to difficult dentition. It is rare to see purpura hemorrhagica in the first year of life and no matter how many hemorrhages have occurred into the subcutaneous tissues and from mucous membranes, scurvy is always the more likely cause in a young infant; besides the symptoms in limbs and gums are almost invariably coincident and complete the picture. Finally, an *injury* to the limb is often suspected, but rarely occurs in such young infants; for they can not walk and have so little opportunity for traumatism.

Prognosis: Scurvy is a disease in which proper treatment works a miracle. It has no tendency to spontaneous recovery; but when recognized and given the proper care, improvement is immediate and cure is surprisingly rapid. No other disease affords the physician a better prospect for brilliant results.

Treatment: Just three measures are indicated for the cure of scurvy: (1) Discontinue the proprietary food. Substitute for it a mixture of fresh milk diluted with water or with oatmeal water. (2) Give fresh orange juice, in dose of one or two teaspoonfuls three times a day. It is surprising how babies with scurvy take to this and seem to enjoy it. (3) Give freshly expressed beef-juice, squeezed from rare steak, in dose of one or two teaspoonfuls three times a day. (4) Give no drugs at all.

* Read before the California Academy of Medicine.

All of my cases have been treated in this simple way. In case No. 1, herewith reported, every symptom had vanished in four days after treatment as above. In case No. 2, after ten weeks of suffering the baby was absolutely well in one week. The recognition of scurvy is easy when only we realize that such a disease exists; the treatment is so simple that we feel almost ashamed to take the credit for the good it accomplishes; and the change we are able to effect at once in a disturbed and discouraged household is so magical that scurvy in infants becomes really the most fortunate disease the physician can ever hope to meet.

DISCUSSION.

Dr. Clarence Quiman stated that he had seen a few of these cases, and that they were certainly interesting. There was a possibility that they might be confused with a rather rare form of congenital syphilis, involving the epiphyses, and this should be looked out for. The etiologic factor was densely masked, though it seemed clearly located in the diet. No particular form of prepared food could be said to be responsible, for they all entered the problem, and in all cases many infants fed on them all did not have scurvy. One writer had noted that milk which had been cooked too long seemed to be responsible.

Dr. Blumer had seen a number of cases in consultation, the diagnosis in one case being cancerous growth of the gums. He was called in as pathologist to examine a specimen of the gum tissue and was able to make the proper diagnosis. He agreed that all prepared foods seemed to be responsible for some cases, but Mellin's food preponderated slightly in this respect.

Dr. Hunkin said that some years ago he reported the occurrence of this disease in three infants and in his opinion Mellin's food was responsible for it. A few days after the statement was published he was threatened with jail if he did not retract; but he had nothing further to say. Many infants were seen in the clinic of the University Medical Department in which a differential diagnosis between scurvy and rickets could not be made with absolute certainty. The condition seemed to be quite as much of the nature of one disease as of the other. Proper regulation of the diet in all these cases resulted in rapid improvement and cure.

Dr. Cheney said that the investigations of the American Pediatric Society, in which data relating to 345 cases were carefully collected and studied, threw but little light on the factor of causation, except to show that diet was the cause, and change of diet the cure. While proprietary foods seemed to be largely responsible, they could not be exclusively convicted, for an occasional instance occurs where the disease develops even when the infant is fed at the breast. It is not food alone, but some other thing in connection with the food, that produces the disease.

MEXICO DESIRES PURE FOOD AND DRUGS.

The following circular has recently been received from Mexico by the Chamber of Commerce of San Francisco, and is of interest as showing that Mexico does not intend to be the last in the procession of nations when the march is toward the goal of pure and wholesome drugs, medicines and foodstuffs:

Mexico, March 15, 1904.—Seal of the Department of Foreign Affairs of Mexico. Department of Chancery. Circular No. 7. International Chancery Control. The Secretary of the Interior has entered into a contract with the "International Chemical Control of Mexico, Ltd." authorizing that company to guarantee to the public the purity and good quality of merchandise and products consumed by the commerce, and to protect manufacturers of good faith against usurpations, falsifications and adulterations which are made of their trade marks or products.

This being a transcendental matter, inasmuch as it refers to the public health and also lends guarantees to international commerce, I recommend you to notify the manufacturers and merchants of your locality of this fact, thus giving the "International Chemical Control" all the help possible within the limit of your faculties.

MERISCAL, Rubric.

Hon. Consul-General of Mexico, San Francisco.

ADDENDUM.

The following addition to the bibliography of Dr. Ellis's address was received too late for publication in the last issue of the JOURNAL:

Vital Statistics, by Cressy L. Wilbur.

PURE FOOD LAW.

By M. E. JAFFA, University of California, Berkeley.

AMONG the important bills introduced in Congress during the present session, that by Congressman Hepburn, relating to the proper labeling of foods, stands out very prominently. Its advantages are so many and its effects so far-reaching that it is hardly possible in a short article to fully discuss and bring out the merits of the bill.

The measure, in brief, provides for the prevention of adulteration, misbranding and imitation of foods and food materials, and for regulating interstate traffic therein. When we remember that fully 75 per cent of the fraud and deception practiced on the public with reference to foods, arises from mislabeling in some form or other, we can better appreciate the efforts of Representative Hepburn, which should have the support and coöperation of all intelligent citizens. Until the people themselves really desire and demand pure food, the government alone can do comparatively little. Laws may be enacted, but they will not be productive of much good unless there is adequate provision made for their enforcement. That this is true is very forcibly illustrated by the exercise of the fertilizer control laws in so many of our states. In every case a laboratory is equipped and maintained for the carrying out of the provisions of the law, and, in addition, bulletins are published periodically containing the results of work done, and in which are printed the names of the transgressors, in connection with the analyses of fertilizers which are found to be below guarantee. It is very much to be regretted that the same cannot be said with reference to the control of food adulteration.

It would appear, from a resume of the different laws in force in the United States on the general subject of adulteration, that the first care is given to the soil for the purpose of protecting its food from fraud. Much less work is devoted to the prevention of deception in the foods for farm animals, while in a few instances only do we find any vigorous enforcement of laws for the inspection of human foods. Indeed, so little general attention is paid to the matter that one writer on the subject defines man as an animal "that adulterates and sometimes poisons his own food and drink." There are, in the main, two methods of adulteration employed; the one harmful and sometimes poisonous to the human system, and the other the deceptive and fraudulent, but not generally injurious to the health of the consumer.

In those States where enforcement of pure food laws is carried on, most of the work is devoted to the detection of the harmful and injurious preservatives, while the second method, just mentioned, has been investigated but to a very limited extent, and there are even certain frauds which do not come within the pale of laws now exercised.

The first method referred to above does not require any extended discussion, because all will agree that no food should be manufactured or sold which contains harmful or injurious ingredients. It would seem that, in the light of our present knowledge, it would be far safer to prohibit the use of preservatives in foods or food materials. If, later on, science can show, as some claim it will, that the small addition of certain preservatives are harmless, then the laws can be modified accordingly. Still it must not be forgotten that the results of experiments made on healthy subjects cannot be expected to be applied to the invalid and convalescent or dyspeptic, for whom many of the foods now containing preservatives are prescribed or recommended.

With the second method, the deceptive and fraudulent, etc., the case is very different. No one should

be prohibited from manufacturing or selling any admixture of foods or food materials, provided the package is *honestly labeled*; thus ensuring the sale of the materials, *for just what they are*.

Several forms of mislabeling can be enumerated, among which the following are the most conspicuous:

1st. False statements concerning the nature of the contents of packages of foods or food materials.

2nd. False statements regarding the nutritive value of the different manufactured and prepared foods.

3rd. False statements or inferences relating to the weight of foods or food materials in any package.

Let us discuss each of these forms separately. With reference to No. 1, it may be said that the fraud, in most cases, is of a pecuniary nature. Cheap materials are added to more expensive ones, thus bringing cheap and inferior products into competition with those from the hands of the honest manufacturer. While the addition of mustard or cottonseed oil to a salad will not have any appreciable effect on the health of the consumer, still there is the pecuniary fraud which should be prevented. At the same time no one should be denied the right to buy the cheap oils. But those who wish to purchase pure olive oil should not have to remain in doubt as to its purity and quality, as at present they so often have to do. The enforcement of proper labeling would obviate all of these difficulties. Again, no prohibitory restrictions should be placed upon the manufacturer who wishes to make a jelly consisting of a mixture of apple and currant, or cornstarch and fruit jelly, or a butterine made up of butter and oleomargarine, etc., etc., nor, in fact, any compound from the admixture of two or more food materials each of which may possess different nutritive and pecuniary values, provided the proper statements are *plainly in evidence* on the label.

In many cases the nature of the main contents of the package is plainly printed, but the type used for the name or names of the adulterants is so small, and often so concealed in the "foliage" of the label that unless one is very careful he is led to believe that the contents consist entirely of the material indicated by the large type. This is particularly true of honey. There are cases where the words "Pure Honey" have a prominent position on the label, but only after careful search will one find the statement, "20 per cent honey and 80 per cent glucose." Thus the manufacturer has complied with the law in name, but, as far as the consumer is concerned, has decidedly evaded it in spirit. There should be no objection against the manufacture of a butter containing 20 per cent of water, if such be stated on the wrapper and the butter be subjected to a discount; because the purchaser should not be obliged to pay for 8 to 10 per cent extra of water at the price of butter fat.

Prominent among the deceptions practiced under the second form above mentioned may be noted several proprietary foods; infant foods, cereal breakfast foods and coffee substitutes, not in the foods themselves, but in the labels. They convey to the mind of the laity decidedly wrong impressions.

In view of the preposterous claims made by some manufacturers of the breakfast foods and for the purpose of ascertaining their nutritive value, the Maine Agricultural Experiment Station undertook an investigation of a large number of cereal breakfast foods, and published the results in bulletin form. The Director of the Station was at once threatened by letter with prosecution by a certain firm manufacturing one of the prominent foods. A reply was made to the effect that the Director was very desirous of such a suit being brought, because he could then

give more publicity to the results of his work than he had been able to do in the station bulletin. No answer was returned to that letter.

Among the prepared foods examined by the Maine station was "Grape-Nuts," made by special treatment of entire wheat and barley. Through their efforts the statement formally made that "four heaping teaspoonfuls of Grape-Nuts are sufficient for the average meal" is now modified to read "for the cereal part of a meal." The manufacturers still persist, however, in stating that "the system will absorb a greater amount of nourishment from 1 pound of Grape-Nuts than from 10 pounds of meat, wheat, oats or bread."

The following from Bulletin No. 55, of the Maine Agricultural Experiment Station shows the absurdity of this and other statements:

"A man at moderate work needs per day about .28 pounds (4½ ounces) of protein and sufficient fats and carbohydrates in addition to make the potential energy of the day's food 3,500 calories. Four heaping teaspoonfuls of Grape-Nuts weigh about 1 ounce. The protein and energy needed for one meal (1-3 of 1 day) and that furnished by four heaping teaspoonfuls of Grape-Nuts are compared in the following table:

	Protein lbs.	Food Value Calores.
Needed for 1/3 day by man at moderate work ...	.090	1,175
Furnished by four heaping teaspoonfuls (1 oz.) of Grape-Nuts .....	.007	117

"It would require .77 pounds of Grape-Nuts (3-4 of a package) to furnish 1-3 of the protein needed for one day for a man at moderate work; the energy needed would be afforded by .63 pounds.

"The nutrients of beef are more completely digested and absorbed than those of vegetable foods. There is no reason for thinking that Grape-Nuts would be more completely digested than rolled oats, wheat flour or wheat bread. About 85 per cent of the protein and of the fuel value of vegetable foods are digested and rendered available to the body.

"In the following table there are compared the pounds of protein and fuel values of one pound of Grape-Nuts with ten pounds of meat, wheat, oats and bread."

"Pounds of protein and fuel value of one pound of Grape-Nuts compared with ten pounds of beef, rolled wheat, wheat flour, rolled oats and bread":

	Protein lbs.	Fuel Value Calores.
1 pound Grape-Nuts.....	.12	1,870
10 pounds Round Steak, including bone.....	1.99	8,950
10 pounds Beef Rump, including bone.....	1.29	11,050
10 pounds Rolled Wheat.....	1.01	17,450
10 pounds Bread Flour.....	1.31	16,450
10 pounds Rolled Oats.....	1.50	19,650
10 pounds White Bread.....	.80	12,200

The above data needs no comment, and a food inspection law properly exercised would prevent this form of fraud.

The Maine Agricultural Experiment Station has also published a paper containing some data regarding the nutritive value of several coffee substitutes. This investigation was undertaken "because of the extravagant claims made for the nutritive value of the decoctions prepared from these materials." On the label of one of them, "MO-KO," prepared in New York appears the statement: "Mo-Ko aids digestion, soothes and quiets worn and wasted nerves." "Mo-Ko, as a complexion beautifier, cannot be equalled. It tones the blood, and by its daily use will impart to the skin a

healthful glow of youth." "Give the children Mo-Ko to drink. It will make them strong and healthy, and will not injure them." The nutritive value of some of these coffee substitutes is well indicated by the following excerpt from the same paper: "Skimmed milk is generally considered a pretty thin beverage, but, as seen from the following table, it contains from three to twenty times as much solids as these so-called nutritious drinks. Wheat-Shred Drink is perhaps a fair illustration of these goods. The label claims it to be 'nutritive in the highest degree', and yet one would have to drink four and one-half gallons of the infusion to get the amount of protein furnished by one quart of skimmed milk. A teacupful (1-5 of a quart) of the decoction, or Postum Cereal, which it is claimed 'nourishes, strengthens and vitalizes', contains about 1-7 of an ounce of solids (dry matter) and about 1-100 of an ounce of protein (nitrogenous matter). While it would take nearly 1-4 of a cup of skimmed milk to furnish this weight of solids, the protein of a cup of Postum Cereal is contained in a dessertspoonful of skimmed milk."

The present paper has nothing to do with the hygienic question of hot or cold drinks. Viewed from the nutritive standpoint alone the following table shows that these coffee substitutes, like coffee itself, depend more for their food value upon the *milk, cream and sugar* used than upon their own soluble constituents.

Nutrients found in skimmed milk, compared with those found in coffee substitute infusions prepared according to printed directions:

Laboratory Number.		Total Solids.	Protein.	Fat.	Carbohydrates.	Ash.
	Skimmed Milk.....	9.75	3.50	.30	5.15	.80
6179	Postum Cereal.....	2.25	.14		1.97	.14
6180	Caramel Cereal.....	1.14	.08		.95	.11
6181	Golden Grain.....	.67	.15		.40	.12
6182	Old Grist Mill Coffee.....	.50	.03		.28	.04
6183	Wheat-Shred Drink.....	3.00	.19		2.66	.15
6288	Grain-o.....	3.28	.17		2.98	.13
6289	Dr. Johnson's Cereal Coffee.....	2.63	.33		3.13	.17
6290	Mo-Ko.....	3.50	.18		3.14	.19

A notable instance of fraud covered by the third class of mislabeling is found in the case of butter sold by the "square." Originally the "square" consisted of two pounds, but at present the weight ranges from one to one and three-fourths pounds. We do not find, however, on the wrapper, as a rule, any statements relative to the weight of butter it encloses.

Many other samples might be given, but it would seem that enough has been said to show the necessity of the enactment and enforcement of National Food Inspection Laws, such as introduced by Congressman Hepburn.

No one will deny the tremendous benefit which has resulted to the agriculturist from the exercise of the Fertilizer Control Laws previously referred to.

If we wish to achieve similar results with reference to human foods, we must proceed in like manner, but, as before stated, the mere passage of the law would not accomplish the work. We must grow up to the law as individuals, and as a people. Law alone will not affect it. Pure Food Conventions alone will not do so—nor will Pure Food Exhibits. All these help, but they accomplish little, so long as the more enlightened and better class of people do not take an active part or display sufficient interest in public affairs, and so long as the municipal offices are in control of men mentally or morally unfit to assume the responsibility. When the public is properly educated on the subject, and people begin to desire pure

food furnished to them in its best form—then, will food laboratories be established and properly maintained; *then* will food laws be strictly enforced and food adulteration become a practice of the past.

THE RAT AND HIS PARASITES; HIS ROLE IN THE SPREAD OF DISEASE, WITH SPECIAL REFERENCE TO BUBONIC PLAGUE.

By B. J. LLOYD, M. D., Asst. Surg. U. S. M. H. S.

(Continued from page 172.)

The occurrence of epidemics of plague in man without rat infection is so rare as to throw doubt upon the accuracy of such report. In one such instance (Russia) this state of affairs is offered as an explanation of the ease with which the epidemic was controlled. For hundreds of years in districts where plague prevails, the death of rats in large numbers has been recognized by all classes as a certain omen of impending calamity, and the advent of plague among rats was sufficient to strike terror into the inhabitants and cause them to flee from their homes. The rats themselves, after a time, become panic-stricken and, losing their usual fear of man, scatter in headlong flight from the infected locality. Rats dead of plague are often found in rooms occupied by human victims. There are numerous instances in which infection in the human being has followed the handling of rats dead of the disease. Direct inoculation has been reported in one case as follows: "A dog belonging to a patient brought into his (Mr. Hill's) bedroom a rat he had killed, and plumped it down on the bed. Mr. Hill at once threw the rat away. The dog then licked his master's hand, on which there was a slight abrasion, and plague showed itself a few days later." I shall not attempt to present in detail evidence in support of the foregoing statements. They can easily be verified by reference to the literature of the subject. A few such references will be introduced, and you may follow up the subject at your pleasure. The earliest historical note connecting rats with plague is in 1st Samuel, 5th and 6th chapters, 1400 years B. C. From Renney (1851), in his account of plague in certain cities in Arabia, we have the following: "There was no particular disorder among cattle, but the outbreak of plague was preceded and accompanied by a great mortality among the rats in their houses." From Creighton, who is quoting Planck: "In the houses of families suffering from an outbreak of plague, rats are sometimes found dead on the floor. * * * Planck has seen them himself. * * * He mentions nine villages, all of them endemic seats of plague, in which the premonitory death of rats in the infected houses was testified." The same author, quoting Baber in China (1878): "The rats are first affected; as soon as they sicken, they leave their holes in troops, and after staggering and falling over each other, drop down dead.

* * * The approach of bubonic plague may often be known from the extraordinary behavior of rats * * * who leave their holes * * * and issue onto the floors, * * * lose their accustomed timidity, and fall dead." The same author, quoting Lowry (1882): "In nearly every house in the Chinese village of Pakhoi, where the disease broke out, the rats had been coming out of their holes and dying on the floors." In addition, White, Gilder, McAdam, Forbes, Glen, Ranken, Arnaud and others make similar statements of various epidemics.

The German Plague Commission (1899) makes the following statement:

Rats generally suffer from a form of plague which occurs in man rarely, if at all, namely, plague of the intestines. When thus diseased they evacuate great quantities of plague germs. It is probable that numbers of plague cases among human beings are due to contact with the evacuations of diseased rats, e. g., in the case of the flooring thus contaminated being trodden on by the naked foot. * * * Children often infect themselves by crawling on the floor and then putting their fingers in the mouth, thus getting plague with neck buboes. * * * It has therefore been proposed to wage war against rats with traps, poisons, suffocating gases, artificially induced epidemic diseases. * * *

Cantlie makes the following observation on prophylaxis: "Seeing that rats and mice are the animals which convey plague, * * * their destruction before a threatened invasion of plague is an absolute necessity if the disease is to be averted."

Manson likens a plague-threatened city to a grate in which a fire is about to be started; the coal is the human inhabitants, the sticks of kindling are the rats and the lighted match is the plague germ.

Simond observes that epidemics of plague among rats follow a course analogous to that of the epidemic in man. The following is from Montenegro:

It may be said that the plague is a disease of rats which readily infects man. Generally, before the epidemic breaks out in a city, bodies of rats which have died of plague are found in the streets and houses. And * * * Hankin has proved that generally the first cases in a population occur precisely in those quarters in which the existence of dead bodies of rats has first been discovered, and in many cases it has been possible to demonstrate that the propagation of the epidemic from one town to another does not follow the route taken by the fugitives from the infected human population, but that taken by the rats in their flight.

Snow of Bombay established that the propagation of the plague did not follow the panic produced in the population by the human cases, but took place long after when the rats emigrated, and in the direction followed by them.

Thomson writes:

Rats are more liable to pest than mankind. * * * It may be stated that plague is a disease of rats, and communicable from them to man. Generally, before

an epidemic breaks out, dead rats are found in the streets and houses. At Satara, and in the infected district thereof, as at Karad in 1897, and subsequent epidemics, this was observed and commented on by the people. The first cases of plague develop precisely in those places where dead rats are first discovered, and spreads from those as foci, rather than following the routes taken by the fugitive panic-stricken inhabitants. Handling the dead bodies of rats, *in the open air*, is not dangerous; going into the warehouses or grain stores to remove them is highly dangerous and fraught with great risk, owing to the insanitary conditions of such pest centers. The fact that rats found under such conditions were pest infected was proved repeatedly by post-mortem and bacteriological and sub-culture tests, etc.

Here we rest our case against the rat. Convinced he stands, and if you indulge me a moment longer, I would like to ask what shall we do about it? I would like to suggest that there is one place where he should be absolutely exterminated, and that is on board ship. This is a simple matter when the vessel is empty, but the problem is not so easy of solution when the vessel is loaded. The trouble arises from the fact that if a plague-infected rat is suffocated in the bottom of the hold of a vessel, that rat cannot be removed until the cargo is discharged. Rat-guards on the lines, while it is a very important measure, does not shut out all shore rats. It is argued that it is useless to kill the rats on a vessel leaving an infected port if you do not remove them from the vessel, an almost impossible task. I do not accept the statement that such a procedure is useless when the rats are not removed. I think the mathematical chances of infecting a port of destination are infinitely less when you have 3 rats in the hold of a ship dead of plague and 300 dead of suffocation, than one where you have 3 rats dead of plague and 300 rats that are living. In other words, I think it is a great deal better than doing nothing at all. So far as a crusade against the rats in a municipality is concerned, I think it is a very important auxiliary measure. The importance of the killing of rats in an infected city is lessened only by the many difficulties which attend such a procedure and the rapidity with which they are replaced. The pertinent question has been asked, "If plague will not exterminate rats and mice, what will?" It is probable that if all our habitations were well lighted (sunlight) and well ventilated and were otherwise in good sanitary condition, plague would die a natural death. It is possible that if plague is allowed to fester in a filthy, overcrowded and otherwise insanitary part of a city, that after years of increase in virulence it may lose its respect for even sanitary habitations, and their occupants will no longer be immune.

I shall close this paper with one other observation: Rat infection in San Francisco, while it has never been extensive, has borne a striking analogy to the infection in human beings, and

plague cases occur in places where infected rats have been found; in one instance dead plague rats and a dead human victim being found in the same room.

It has been found in the application of sanitary measures in various places that poisoning rats, disinfecting, medical inspection, etc., while they are very important auxiliaries, are not nearly so effective as the tearing out of filthy habitations and the reconstruction of such buildings on good sanitary principles. This kind of work goes far toward getting rid of the rat by alteration of environment, and at the same time decreases the chances of infection from such as remain, inasmuch as the rats will seek the darker recesses of the building, and in this way will not come in contact with its human occupants nearly so frequently as they do in the close, dark rooms of many of our present buildings in Chinatown. Not only this, but it has been repeatedly noted that the danger of contracting plague from infected rats is very much lessened when the contact with the rat is in a pure atmosphere, just as it is with human cases.

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CORRECTION.

Dr. Nagel wishes to have the transcript of his discussion as printed on page 158 of the May JOURNAL somewhat altered. He says: "I stated that experience had taught me that the beginner is always looking for complete cupping of the disk, whilst such may be only partial though the diagnosis be fully established. Speaking to the aspect of sympathectomy as regards the cure of glaucoma, I dwelled somewhat on an analysis of 75 cases of that operation published in 1901."

Champagne and Nostrums. Far better, ladies, that the contents of a bottle of champagne should go into the water, where it will do no one any harm, than that the contents of a bottle of "patent medicine," with 40 per cent of alcohol in it, by volume, should be allowed to go into the system of a child and strike at his very soul, planting the seed of a future drunkard! —Bok, in *Ladies' Home Journal*.

Lydia Pinkham's Alcohol. I have had women rage in letters to this office because this magazine advertised a certain rootbeer, with really no alcohol in it at all, while all the time these same women were swallowing bottle after bottle of "Lydia Pinkham's Vegetable Compound," containing, by volume, 20.6 percentage of alcohol, and allowing "Boker's Stomach Bitters," with 42.6 percentage of alcohol, by volume, to be advertised on their barns.—Bok, in *Ladies' Home Journal*.

COMMUNICATION.

Inert Preparations of Digitalis.

To the Editor of the State Journal:

Believing that the point is an important one because of the almost universal use of the drug in question, I wish to call attention to my findings, and to learn if any of my brethren have had similar experience. Some time ago I had occasion to use digitalis in a very critical case and got no result; a few days after, another case seemed to demand its use and I tried the fluid extract of a reliable manufacturer with no result; fearing that the specimen might have been old, I tried one after another of the standard manufacturers', until five trials had been made, and then gave up in disgust. On telling my experience to my brother practitioners I find that many of them gave up the use of all preparations of digitalis, except the infusion, because of their unreliability. Now, we are taught to regard digitalis as one of the "old reliables" in medicine and the cases demanding its use are usually ones where we cannot afford to trust to uncertainties. I should like to hear from the readers of the STATE JOURNAL regarding their opinion on the matter, for if the specimens on the market are of no value, the sooner we know it the better.

Very truly yours,
C. S. H.

NEW BUILDING FOR BELLEVUE HOSPITAL.

The announcement has very recently been made of the intention to put up a new building for Bellevue Hospital, New York City, which, it is said, will be the finest hospital in the world. It is estimated that the building, with its thirteen pavilions, will cost about \$15,000,000, and will accommodate 2,500 patients. It will face on First Avenue and the East River, and occupy the land from Twenty-sixth to Twenty-ninth Streets. Accommodations will be provided for 100 physicians.

A Frank Eclectic Opinion.—The so-called doctor who is so deficient in cerebral gray matter that he is not better qualified to prescribe for his patrons than some firm manufacturing a cure-all had better quit the business. This kind of prescribing is simply reviving the old fallacy of entity in disease, which has passed through all stages from demonology to microbes; the use of charms, amulets, incantations and bacteria killers; and I honestly believe the charms, etc., were less harmful than the latter-day nostrums so extensively advertised in the medical and secular press. Ed. in *Eclectic Medical Journal*, Cincinnati, O.

The National Bureau of Medicines and Foods will be the first question at the meeting of the American Academy of Medicine, Atlantic City, June 4th. It will come up on the report of the Council on the paper read last year by Dr. H. Bert. Ellis, and at that time referred to the Council for consideration and recommendations.

No Right to Give Nostrums. No woman has a moral right to give a medicine to her child, or to any member of her family, or to take any medicine herself, the ingredients of which either she does not know or has not the assurance of a responsible physician to be harmless. There is nothing so dangerous as drugs used without intelligence or taken without advice. The physician's fee of a dollar or two, which the mother seeks to save, may prove to be the costliest form of economy which she has ever practiced.—*Ladies' Home Journal*.

STATE EXAMINATIONS, APRIL, 1904.

Passed.

Cooper Medical College, San Francisco, (1903)	77.5, 79.8
University of California, (1903) 82.5, 82.8, 84.4, 84.5, 81.3, 86.6, 87.1, 79.4, 85.5, 79.7.	
College of Physicians and Surgeons, California, (1902), *76.4, *81.7; (1903) 75.5, 78.3, *78.	
Rush Medical College, Chicago, (1894), 77.4, 76.2; (1896) 80.8; (1897) *78.4, 83.4; (1901) 85, 92.2; (1902), 83.6.	
College of Physicians and Surgeons, Chicago, (1899) 87.6; (1900) 81.3; (1902) 78.8.	
University of London	(1895) 91.6
Medico-Chirurgical College, Philadelphia..	(1894) 78.3
University of Minnesota	(1903) 79.3
Bellevue Hospital Medical College, N. Y. (1878)	77.1
Baltimore Medical College	(1901) 76.8
Woman's Medical College, Philadelphia ..	(1893) 84.4
University of Michigan	(1902) 84.5
University of Pennsylvania	(1890) 76.3
Tufts Medical College, Boston	(1901)*75.0
Barnes Medical College, St. Louis	(1898)*79.1
Georgetown University, Dist. of Columbia	(1900) 81.4
Michigan College of Medicine.....	(1900) 81.8
University of Vienna, Austria	(1891)*85.1
Starling Medical College, Columbus, Ohio.	(1893) 81.1
American Medical Missionary College, Ill.	(1903) 88.1
Vanderbilt University, Tennessee	(1903) 78.5
New York Homeopathic Medical College	(1896) 75.1

Failed.

University of Louisville, Kentucky	(1880) 38.3
Rush Medical College, Chicago	(1878) 70.6
St. Louis Medical College, Missouri	(1877) 53.2
Detroit College of Medicine	(1897)*34.3
University of Dublin, Ireland	(1897) 70.4
College of Physicians and Surgeons, Chicago	(1892) 71.8
Laura Memorial Medical College, Ohio ..	(1903) 63.4
Tufts Medical College, Boston	(1897) 60.8
Western Pennsylvania Medical College ..	(1889) 69.4
Bellevue Hospital Medical College, N. Y.	(1894) 46.1
Meharry Medical College, Tennessee ..	(1884) 22.3
Trinity Medical College, Ontario	(1884) 73.7
College Medicine and Surgery, Michigan	(1901) 73.5
Trinity University, Dallas, Texas	(1903) 69.3
College Physicians and Surgeons, N. Y.	(1896) 68.0
Ohio Medical College	(1902) 72.1

Conditioned.

Columbia College; New York.....	(1888) 75.0
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Note.—In the list of this examination, published in the *Journal A. M. A.*, May 7, two successful candidates were omitted: University of Pennsylvania, 1890, and Vanderbilt University, Tennessee, 1903.

*Candidates so indicated had failed on previous examinations.

A WORD FROM DR. TEABY.

Dr. W. L. Teaby, who was referred to in the April number of the *JOURNAL*, writes to us that his position in relation to lodge practice was misunderstood. Dr. Teaby, it may be said, appeared before the Board of Examiners at their last session and passed the examination very creditably; he has returned to Monterey to locate. He says: "The only order which I joined was the N. S. G. W., and they do not allow fees. I was approached by other secret societies and offered the position of surgeon, but refused them all, because I do not believe in these so-called 'starvation fees,' "

It is with much pleasure that we publish this statement of Dr. Teaby's attitude toward that worst disease of the body-medical—lodge or contract practice. We wish him every success in his profession and trust that he will adhere to the principles which he has expressed.

ALCOHOL IN "PATENT MEDICINES."

The following percentages of alcohol in the "patent medicines" named are given by the Massachusetts State Board Analyst in the published document No. 34:

	Per cent. of alcohol (by volume)
Lydia Pinkham's Vegetable Compound.....	20.6
Paine's Celery Compound	21
Dr. Williams's Vegetable Jaundice Bitters	18.5
Whiskol, "a non-intoxicating stimulant".....	28.2
Colden's Liquid Beef Tonic, "recommended for treatment of alcohol habit,"	26.5
Ayer's Sarsaparilla	26.2
Thayer's Compound Extract of Sarsaparilla....	21.5
Hood's Sarsaparilla	18.8
Allen's Sarsaparilla	13.5
Dana's Sarsaparilla	13.5
Brown's Sarsaparilla	13.5
Peruna	28.5
Vinol, Wine of Cod-Liver Oil	18.8
Dr. Peters's Kuriko	14
Carter's Physical Extract	22
Hooker's Wigwam Tonic	20.7
Hoofland's German Tonic	29.3
Howe's Arabian Tonic, "not a rum drink"	13.2
Jackson's Golden Seal Tonic	19.6
Mensman's Peptonized Beef Tonic	16.5
Parker's Tonic, "purely vegetable"	41.6
Schneck's Seaweed Tonic "entirely harmless"....	19.5
Baxter's Mandrake Bitters	16.5
Boker's Stomach Bitters	42.6
Burdock Blood Bitters	25.2
Greene's Nervura	17.2
Hartshorn's Bitters	22.2
Hoofland's German Bitters, "entirely vegetable"	25.6
Hop Bitters	12
Hostetter's Stomach Bitters	44.3
Kaufman's Sulphur Bitters, "contains no alcohol" (as a matter of fact it contains 20.5 per cent of alcohol, and no sulphur)	20.5
Puritana	22
Richardson's Concentrated Sherry Wine Bitters	47.5
Warner's Safe Tonic Bitters	35.7
Warren's Bilious Bitters	21.5
Faith Whitcomb's Nerve Bitters	20.3

In connection with this list, think of beer, which contains only from two to five per cent of alcohol, while some of these "bitters" contain ten times as much, making them stronger than whisky, far stronger than sherry or port, with claret and champagne way behind.

Indecent Religious Papers. Beside me, as I write, lie issues of some twenty different "religious" weeklies, the advertising columns of which are a positive stench in the nostrils of decent, self-respecting people. Let the Woman's Christian Temperance Union officers counsel its members who subscribe for these papers to compel their publishers to omit these advertisements, and if they refuse, let these people discontinue their patronage of the paper. Such measures would very quickly shut out from publicity the majority of these baneful patent medicines.—Bok, in *Ladies' Home Journal*.

OFFICIAL MINUTES OF THE MEETINGS
OF THE
MEDICAL SOCIETY OF THE STATE OF CALIFORNIA
AT ITS THIRTY-FOURTH ANNUAL SESSION

HELD AT
PASO ROBLES, APRIL 19, 20, 21, 1904.

SCIENTIFIC BRANCH.

FIRST SESSION, TUESDAY MORNING, APRIL 19.

Meeting called to order at 10 A. M., by Dr. W. A. Flint, Santa Barbara, first vice-president, who introduced Dr. J. K. McLennan, Paso Robles, who delivered an address of welcome.

*The president, Dr. H. Bert. Ellis, Los Angeles, was then introduced and delivered the annual address.

*The Address in Medicine was then delivered by Dr. R. F. Rooney, Auburn, on "Preventive Medicine."

*The Address in Surgery was delivered by Dr. J. Henry Barbat; title, "Surgical Treatment of Chronic Dysentery."

The report of the Memorial Committee was then read by Dr. J. Lambert Asay, San Jose.

Drs. W. F. Barbat and A. B. Grosse were appointed assistant secretaries. It was moved and carried that when the general session adjourn, it adjourn in memory of those members who had died during the year.

*A telegram from the Canadian Medical Association was then read. (See JOURNAL, May, p. 157.)

On motion, a vote of thanks was extended to the readers of the annual addresses.

Adjourned, 11:50 A. M.

EVANS, Secretary.

SECOND SESSION, TUESDAY.

Called to order at 2 P. M. Report of the Committee on Medical Education and Legislation was read by the chairman, Dr. H. S. Orme, Los Angeles. Discussed by Drs. Krone, Oakland; Edwards, Salinas; Wills, Los Angeles, and Orme, Los Angeles.

Dr. W. S. Thorne, San Francisco, read a paper, "Some Reflections on State Examining Boards." Discussed by Dr. Dudley Tait, San Francisco; closed by Dr. Thorne.

Dr. Follansbee, Los Angeles, announced the serious illness, and grave condition of Dr. Charlotte Blake Brown. On motion of Dr. Lindley, the president was instructed to telegraph to the family of Dr. Brown, offering the sympathy of the Society. Carried.

Report of Committee on Hygiene, Sanitation and Climatology. Dr. N. K. Foster reported; title, "Sanitary Needs of the State." Discussed by Drs. M. Regensburger, San Francisco; Brown, Nipomo; Orme, Los Angeles; Browning, Highland; Foster, Sacramento.

Report of the Committee on Chemistry and Physiology. Dr. O. O. Witherbee, Los Angeles, read a paper; title, "Innervation of the Heart with Consideration of Cardiac Stimulants." Discussed by Drs. Krone, Oakland; Sherman, San Francisco; Murphy, Los Angeles; Hunkin, San Francisco, and Witherbee.

Dr. Martin Fischer, Berkeley, read a paper; title, "Reversible Action of Enzymes." Discussed by Dr. Witherbee, Los Angeles, and Fischer, Berkeley.

Report of Committee on Pathology and Bacteriology. Dr. Ethel L. Leonard, Los Angeles, read a paper; title, "A New Chromogenic Air Organism; Bacil-

lus Cyaneus." Discussed by Dr. Ryfkogel, San Francisco.

Adjourned, 4:35 P. M.

BARBAT, Secretary.

WEDNESDAY MORNING SESSION.

Called to order at 9 A. M. A telegram read from Drs. Adelaide and Philip King Brown announcing the death of Dr. Charlotte Blake Brown. Moved and carried that when the general session adjourn, it adjourn in memory of Dr. Charlotte Blake Brown.

Report of the Committee on Medicine and Therapeutics. Dr. John C. King, Banning, read a paper; title, "Observations on Sanatoria for Pulmonary Tuberculosis." Dr. F. M. Pottenger, Los Angeles, presented report of the Special Committee on Tuberculosis, appointed at last meeting. Moved and carried that report be referred to House of Delegates with recommendation that the recommendations in the report be adopted. Dr. George Blumer read a paper by himself and Dr. A. J. Lartigau, San Francisco; title, "Healed and Quiescent Pulmonary Tuberculosis, with Remarks on Pleural Tubercles." These papers were discussed by Drs. Cole, Los Angeles; Parkinson, Sacramento; Von Adelung, Oakland; Follansbee, Los Angeles; Barkan, San Francisco; Kelly, San Francisco; King, Banning; Blumer, San Francisco, and Pottenger, Los Angeles. Dr. G. F. Reinhardt, Berkeley, read a paper; title, "Malarial Nephritis." Discussed by Drs. Davisson, Los Angeles, and Reinhardt, Berkeley. Dr. George L. Cole, Los Angeles, read a paper; title, "Concretio Pericardii cum Corde," (Report of a case.) Discussed by Drs. Brainerd, Los Angeles; Evans, San Francisco, and Blumer, San Francisco. Paper by Dr. Harold P. Hill, read by title and referred to Publication Committee. Paper by Dr. George H. Evans, San Francisco; title, "Illustrative Cases of Myelogenous Leukemia; Preliminary Report." Discussed by Drs. Blumer and Ryfkogel. Dr. A. J. Sanderson, San Francisco, read a paper; title, "Hydrotherapy in Rheumatism." Discussed by Drs. Woolsey, Oakland; Crees, Byron; Evans, San Francisco; Brown, Nipomo, and Sanderson, San Francisco. Paper by Dr. Lewis J. Belknap, San Jose, read by title and referred to the Publication Committee.

WEDNESDAY AFTERNOON SESSION.

Called to order at 2 P. M. Report of the Committee on Genito-Urinary Diseases. Address by chairman, Dr. Dudley Tait, San Francisco. Paper by Dr. Granville MacGowan, Los Angeles; title, "Surgical Interference for Relief of Tuberculosis of the Bladder." Discussion by Drs. Goodfellow, Chismore, Rosenstirn, Krotoszyner, Morton, Grosse and Reynolds, San Francisco, and MacGowan, Los Angeles. Dr. Dudley Tait, San Francisco, read a paper; title, "Contribution to the Study of Varicocele." Discussed by Drs. Krotoszyner, Rigdon and Tait, San Francisco. Dr. George Goodfellow, San Francisco, read a paper by title and it was referred to the Publication Committee. Dr. George Chismore read a paper; title, "Interesting Cases of Prostatic Calculus." Discussed by Drs. Kelly

and Krotoszyner, San Francisco; MacGowan, Los Angeles, and Chismore, San Francisco. Dr. Krotoszyner, San Francisco, read a paper by himself and Dr. W. P. Willard; title, "Aseptic Catheterization of the Urinary Passages." Discussed by Drs. Rigdon, Eaton and Krotoszyner, San Francisco; Krone, Oakland, and MacGowan, Los Angeles. Dr. George L. Eaton, San Francisco, read a paper; title, "Technic of Genito-Urinary Examination." Discussed by Drs. Reynolds, San Francisco, and Dr. Eaton. Dr. R. L. Rigdon, San Francisco, read a paper; title, "Fistulae of the Male Urethra." Dr. Harry B. Reynolds, San Francisco, read a paper; title, "Report on Some Renal Tumors."

THURSDAY MORNING SESSION.

Called to order at 9 A. M. Report of the Committee on Surgery and Anatomy. Dr. Emmet Rixford, San Francisco, read a paper; title, "Inflammation of Appendices Epiploicae." Dr. A. W. Morton, San Francisco, read a paper; title, "Conservative Treatment of Acute Appendicitis." Dr. W. I. Terry, San Francisco, read a paper; title, "Cases of Acute Suppurative Appendicitis Treated by the Oschner Plan." Dr. C. Van Zwahlenburg, Riverside, read a paper; title, "Appendicitis; Some Points in its Diagnosis and Treatment from the Viewpoint that its Cause is a Strangulation Produced by Distention Behind a Ball Valve." These papers discussed by Drs. Lobingier, Los Angeles; Barbat, San Francisco; Rosenstirn, San Francisco; Wills, Los Angeles; Sherman, San Francisco; Krone, Oakland; Wakefield, San Francisco; Rixford, Morton and Terry, San Francisco, and Van Zwahlenburg, Riverside. Dr. Charles D. Lockwood, Los Angeles, read a paper; title, "Intestinal Obstruction; with Report of Three Unusual Cases." Discussion by Drs. Terry, San Francisco, and Murphy, Los Angeles. Dr. James T. Watkins, San Francisco, read a paper; title, "Some Mechanical Aspects of Scoliosis and Demonstration of Apparatus." Discussed by Drs. Pahl, Los Angeles; Hunkin, San Francisco; Wills, Los Angeles; Sherman, San Francisco, and Watkins, San Francisco. Dr. P. C. H. Pahl, Los Angeles, read a paper; title, "Congenital Dislocation of the Hip." Discussion by Dr. Hunkin, San Francisco.

Adjourned at 12 M.

THURSDAY AFTERNOON SESSION.

Called to order at 2 P. M. Dr. Claire W. Murphy, Los Angeles, read a paper; title, "Echinococcus of the Liver, with Report of a Case." Discussion by Drs. Lockwood, Los Angeles; Tait and Terry, San Francisco; Murphy, Los Angeles. Same author, another paper; title, "Surgical Anatomy of the Inguinal Canal." Discussion by Drs. Wills, Los Angeles; Barbat, San Francisco; Hare, Fresno; Lobingier, Los Angeles; Terry, San Francisco; Witherbee, Los Angeles, and Murphy, Los Angeles. Dr. T. C. McCleave, Berkeley, read a paper; title, "A Case of Trigeminal Neuralgia, Presenting Some Unusual Features, Treated by Intraneural Injections of Osmic Acid." Discussion by Drs. Sherman, San Francisco, and Thomas and McCleave, Oakland. Dr. J. Henry Barbat, San Francisco, read a paper; title, "Uretero-Cystotomy, with Report of a Case." Discussion by Drs. Tait, Eaton, Carpenter and Barbat, San Francisco. Dr. A. B. Grosse, San Francisco, read a paper; title, "Report of a Case of Scleroderma Diffusa and Sclerodactylia; Its Clinical Aspect, Treatment, Postmortem Findings, and Histopathology." Discussed by Drs. Blumer and Grosse, San Francisco.

Adjourned.

TUESDAY AFTERNOON SESSION.

Eye, Ear, Nose and Throat Section.

Called to order at 3 P. M. Report of the Committee on Diseases of the Eye. Dr. B. F. Church, Los Angeles,

read a paper; title, "Concerning the Varieties and Etiology of Glaucoma." Discussed by Drs. R. W. Miller, Los Angeles, and B. F. Church, Los Angeles. Dr. W. H. Roberts, Pasadena, read a paper; title, "The Pathology of Glaucoma." Paper by Dr. A. B. McKee, San Francisco, (absent); title, "The Symptoms of Glaucoma," read, on motion, by Dr. Church. Discussion on the foregoing papers opened by Dr. W. B. Stephens, San Francisco, and continued by Dr. Briggs, Sacramento. On motion of Dr. Church, Los Angeles, a general discussion of the subject was called for, and participated in by Drs. Miller, Los Angeles; Thomas, Oakland; Nagel, San Francisco; Baker, San Diego; Roberts, Pasadena, and Church, Los Angeles.

Adjourned, 4:15 P. M.

WEDNESDAY AFTERNOON SESSION.

Eye, Ear, Nose and Throat Section.

Called to order at 2 P. M. Paper by Dr. W. M. Fredericks, San Francisco; title, "Tonsils as Portals of Infection." read by title and referred to Publication Committee. Paper by Dr. W. B. Stephens, San Francisco; title, "Post Operative Effects of Tonsilotomy." Paper by Dr. J. A. Black, San Francisco; title, "Surgical Treatment of Chronic Tonsillitis." These papers discussed by Drs. Roberts, Pasadena; Parker, Riverside; Brown, Nipomo; Barkan, San Francisco; Briggs, Sacramento; Powell, Stockton; Miller, Los Angeles; Baker, San Diego; and Pischel, San Francisco. Paper by Dr. E. W. Fleming, Los Angeles; title, "Early Clinical Manifestations of Tubercular Laryngitis," read by title and referred to Publication Committee. Paper by Dr. Fred Baker, San Diego; title, "Report of Cases Simulating Grave Mastoiditis." Discussion by Drs. Roberts, Pasadena; Briggs, Sacramento; Miller, Los Angeles, and Barkan, San Francisco. Paper by Dr. A. Barkan, San Francisco; title, "The Importance of Chronic Otorrhea, as Viewed by the Life Insurance Companies and the Medical Recruiting Officer." Dr. K. Pischel, San Francisco, demonstrated "The Use of Collodium After Nose Operations." Paper by Dr. W. E. Hibbard, Pasadena; title, "A Few Thoughts on Accessory Sinus Work," read by title and referred to Publication Committee.

Section on Pediatrics.

Paper by Dr. H. N. Rowell, Berkeley; title, "Neurasthenia in Childhood." Discussed by Drs. Wilde, Los Angeles; Parkinson, Sacramento; Winslow, Bartlett Springs; von Adelung, Oakland; Baker, San Diego; Pratt, Oakland, and Rowell, Berkeley. Paper by Dr. J. Maher, Oakland; title, "The Complications and Sequelae of Measles." Discussion by Drs. von Adelung and Pratt, Oakland; Evans, San Francisco; Parkinson, Sacramento; Baker, San Diego; Brown, Nipomo; Wilde, Los Angeles; Hunkin, San Francisco; Thomas, Oakland; Winslow, Bartlett Springs; Pischel, San Francisco, and Maher, Oakland.

Adjourned, 5:15 P. M.

THURSDAY AFTERNOON SESSION.

Dr. J. W. Robertson, Livermore, read a paper; title, "The Legal Responsibility of Medical Experts." Discussed by Drs. Brainerd, Los Angeles, and Rooney, Auburn. On motion, Dr. W. W. Beckett's paper, title, "Some Remarks on Hysterectomy, with Appended Report of One Hundred Cases," was then read. Discussed by Drs. Wakefield, San Francisco; A. W. Morton, San Francisco, and Beckett, Los Angeles.

Report of the Committee on Obstetrics. Paper by Dr. Henry Gibbons Jr., San Francisco; title, "Second and Fourth Positions of the Vertex." Paper by Dr. Charlotte Baker, San Diego; title, "Diagnosis and Management of Transverse Presentation in the Later

Months of Pregnancy." Papers discussed by Drs. Ewer, Oakland; Van Orden, Alameda; Buteau, Oakland; McCleave, Los Angeles; Krone, Oakland, and referred by Drs. Gibbons and Baker.

Report of Committee on Gynecology. Paper by Dr. Beverly MacMonagle, San Francisco; title, "Some Remarks on Gonorrhea in Women," read by title and referred to Publication Committee. Paper by Dr. W. F. B. Wakefield, San Francisco; title, "Utero-Sacral Ligaments and their Relation to the General Pelvic Conditions, of which Retroversion is the Chief Symptom." Discussed by Drs. Krone, Oakland, and Wakefield, San Francisco. Minutes read and approved.

Adjourned, 4:30 P. M.

GEORGE H. EVANS, Secretary.

LEGISLATIVE BRANCH.

FIRST SESSION, TUESDAY, APRIL 19.

Opened at 8 P. M. Roll call showed 30 present.

Communications from San Bernardino, Ventura and Contra Costa counties regarding representation in Legislative Branch, were read.

The chair ruled that Ventura delegate, not being regularly accredited, could not be seated. This decision, on appeal, was sustained by the Legislative Branch. The report of the secretary was read and ordered placed on file. The report of the Board of Trustees was read by the secretary of the Board, Dr. J. Rosenstirn, and motion made that it be placed on file; seconded and carried.

The report of the treasurer was read by Dr. E. E. Kelly.

Moved and seconded that the reports of the secretary and treasurer be referred to a Business Committee, to report at the next session. Carried.

Moved and seconded that this Committee consist of three; carried. Committee appointed as follows: Drs. Wills, Sherman and Barbat.

Report of the Special Committee, to confer with permanent members and members-at-large, was read by the chairman, Dr. J. H. Parkinson. On motion, the report was accepted and placed on file, and the recommendations adopted.

Report of Publication Committee was read by the chairman, Dr. Philip Mills Jones, and, on motion, was referred to Special Committee of three to consider the recommendations and report at the next session. Committee appointed as follows: Drs. Carpenter, Bullard and King.

Report of Committee on Tuberculosis was referred to Scientific Branch, to be taken up with other papers on tuberculosis.

Report of Committee on Constitution and By-Laws was presented by Dr. Philip Mills Jones at the request of the chairman, Dr. C. G. Kenyon. Moved and seconded that report of Committee be referred back to Committee, to report tomorrow night. Moved as an amendment that matter be taken up and discussed section by section; seconded; carried.

*Constitution.

ARTICLE I.

Sec. 1. Adopted.
Sec. 2. Adopted.

ARTICLE II.

Adopted.

ARTICLE III.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.
Sec. 4. Adopted.
Sec. 5. Adopted.

ARTICLE IV.

Adopted.

ARTICLE V.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.

ARTICLE VI.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.

ARTICLE VII.

Adopted.

ARTICLE VIII.

Adopted.

ARTICLE IX.

Adopted.

ARTICLE X.

Adopted.

ARTICLE XI.

Sec. 1. Adopted.
Sec. 2. Adopted.

ARTICLE XII.

Adopted.

ARTICLE XIII.

Adopted.

By-Laws.

ARTICLE I.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Moved to amend this Section by inserting "21 days" instead of "one month" in fourth line thereof.

Moved as substitute motion that Section be adopted as read.

Committee recommended 21 days; the other motion was withdrawn, and section adopted according to recommendation: "21 days."

Sec. 4. Adopted.
Sec. 5. Adopted.

Sec. 6. Moved and seconded that in rejecting this Section, it be understood that those who are now honorary members remain so; carried. Section 6 rejected.

ARTICLE II.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.
Sec. 4. Adopted.

ARTICLE III.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.
Sec. 4. Adopted.
Sec. 5. Adopted.
Sec. 6. Adopted.
Sec. 7. Adopted.
Sec. 8. Adopted.
Sec. 9. Moved and seconded that House of Delegates be substituted for "it" on first line; carried.

Sec. 10. Same motion prevailed and that "it" be substituted for "House of Delegates" on third line; carried.

Sec. 11. Moved that "House of Delegates" be substituted for "it" on first line; carried.

Moved that a new section be created known as Sec. 12, to read: "Members of the House of Delegates shall be designated by an appropriate badge." Carried.

ARTICLE IV.

Sec. 1. Adopted.
Sec. 2. Adopted.
Sec. 3. Adopted.
Sec. 4. The following substitute was adopted:

Sec. 4. The Treasurer of the Society shall be some bank, trust company or other public depository to be determined by the Council. All funds received for the Society by any officer, committee or agent,

* The Constitution and By-Laws here acted upon will be found in the JOURNAL, Dec. '03, p. 117, Jan. '04, p. 33, and Feb. '04, p. 65.

shall be at once deposited with the Treasurer. The Treasurer shall pay out the money of the Society only upon a properly executed check, issued by the Secretary and signed by the Chairman of the Council. The Secretary shall issue such checks upon the authorization of a properly executed voucher, signed by the Auditing Committee of the Council, and not otherwise. A cash fund of twenty five dollars (\$25.00) may be left with the editor or business manager of the publication office, from which fund petty cash items may be paid. But no bill exceeding five dollars (\$5.00) shall be paid except by check and in the manner herein provided.

Sec. 5. Adopted.

ARTICLE V.

Sec. 1. Adopted.

Sec. 2. Adopted.

Sec. 3. Adopted.

Sec. 5. Adopted.

Sec. 6. Adopted.

Sec. 7. Moved and seconded that "The Council" be substituted for "it" in Secs. 4, 5, 6, and 7; and that "it" be substituted for "the Council" on 18th and 21st lines of Sec. 6; carried.

Sec. 8. Adopted.

ARTICLE VI.

The entire Article, together with the substitute article proposed, was read. Moved to amend Sec. 4 of substitute by striking out everything after "members," on second line, to "it" at beginning of seventh line. Motion seconded and carried.

Moved and seconded that substitute to Art. VI. (with exception of Sec. 7) be adopted, Sec. 7 becoming Sec. 6. Article VI. as adopted, is as follows:

ARTICLE VI.

COMMITTEES.

SECTION 1. The standing committees shall be as follows:

A Committee on Scientific Work.

A Committee on Public Policy and Legislation.

A Committee on Arrangement, and such other committees as may be necessary. Such committees shall be elected by the House of Delegates, unless otherwise provided.

Sec. 2. The Committee on Scientific Work shall consist of five members, of which the Secretary shall be one, and shall determine the character and scope of the scientific proceedings of the Society for each session, subject to the instructions of the House of Delegates. Thirty days previous to each Annual Session it shall prepare and issue a program announcing the order in which papers, discussions and other business shall be presented.

Sec. 3. The Committee on Public Policy and Legislation shall consist of three members and the President and Secretary. Under the direction of the House of Delegates it shall represent the Society in securing and enforcing legislation in the interest of public health and of scientific medicine.

Sec. 4. The Committee on Arrangements shall consist of three members. It shall provide suitable accommodations for the meeting places of the Society and of the House of Delegates, and of their respective committees, and shall have general charge of all the arrangements. Its Chairman shall report an outline of the arrangements to the Secretary for publication in the program, and shall make additional announcements during the session as occasion may require.

Sec. 5. The Committee on Publications shall consist of the editor, as chairman, and four members appointed by the President. This committee shall have supervision of the general nature, scope and

policy of all publications issued by the Society, and shall have authority to publish, or exclude from publication in the JOURNAL or Register such matter as it may determine. When any question of unusual importance arises, it may meet with and consider such question or questions with the Council, and the determination of the Council and the Committee on Publications, in such joint conference, shall obtain until the question shall be settled by the House of Delegates.

Sec. 6. No paper, address or report presented before the general meeting, except the address of the President, shall occupy more than twenty minutes. In discussion, no member shall be allowed to occupy more than five minutes, except by consent.

ARTICLE VII.

Sec. 1. Adopted.

Sec. 2. Adopted.

Sec. 3. Adopted.

ARTICLE VIII.

Sec. 1. Adopted.

Sec. 2. Adopted.

Sec. 3. Adopted.

Sec. 4. Adopted.

Sec. 5. Moved and seconded that "eligible" be substituted for "entitled" on seventh line.

Sec. 6. Moved that Section be amended by striking out "its decision shall be final," and substituting "if the decision of the Council be questioned an appeal shall be taken to the House of Delegates, whose decision in any case shall be final." Motion carried.

Sec. 7. Adopted.

Sec. 8. Adopted.

Sec. 9. Adopted.

Sec. 10. Adopted.

Sec. 11. Adopted.

Sec. 12. Adopted.

Sec. 13. Adopted.

Sec. 14. Adopted.

Sec. 15. Adopted.

Sec. 16. Adopted.

Sec. 17. Adopted.

Sec. 18. Adopted.

Sec. 19. Adopted.

ARTICLE IX.

Sec. 1. Moved and seconded that "Committee on Arrangements" be substituted for "Memorial Committee." Motion lost, and Section eliminated.

ARTICLE X.

Sec. 1. Adopted.

ARTICLE XI.

Sec. 1. Adopted.

Sec. 2. Adopted.

Sec. 3. Adopted.

ARTICLE XII.

Sec. 1. Adopted.

Sec. 2. Adopted.

Dr. Barbat moved that Constitution and By-Laws be adopted as a whole, with amendments. Moved and seconded that Art. IX. be eliminated; carried. Previous motion then carried.

Moved and seconded that we adjourn. 11:45 P. M.

SECOND SESSION, WEDNESDAY, APRIL 20.

Opened at 8 P. M. Roll call showed 36 present.

San Bernardino County Society delegate seated. Minutes read and adopted. Dr. Carpenter made announcement in regard to tickets and Pullmans. Report of Business Committee was adopted as read. Resolutions were read and were referred to Business Committee. Special Committee, to which report of Committee on Publications was referred, was read, and, on motion, was adopted. (These reports will be found printed at the conclusion of the minutes.)

Place of Meeting.

Riverside was placed in nomination by Dr. Van Zwalenburg. San Francisco was placed in nomination by Dr. W. I. Terry. Del Monte was nominated by Dr. Edwards.

Moved and seconded nominations close; carried. On motion, the secretary was instructed to record the vote by roll call. Riverside, having received 33 votes, was decided to be the place for the next meeting.

Election of Officers.

President: Dr. Frank L. Adams, of Oakland, was nominated by Dr. Bates and seconded by Dr. LeMoyne Wills. Moved nominations close, and the secretary cast the ballot of the Society; carried. Secretary cast the ballot, and Dr. Adams was declared elected.

First Vice President: Dr. W. T. Lucas, of Santa Barbara, was nominated by Dr. Carson. Nominations closed, and secretary cast the ballot.

Second Vice President: Dr. W. W. Beckett, of Los Angeles, nominated by Dr. Mattison. There being no other nominations, the secretary cast the ballot for Dr. Beckett.

Secretary: Dr. Philip Mills Jones, of San Francisco, nominated by Dr. Evans. There being no other nominations, the secretary cast the ballot.

The following officers were elected:

First Assistant Secretary: Dr. T. C. McCleave.

Second Assistant Secretary: Dr. W. F. Barbat.

Board of Examiners: Dudley Tait and W. S. Thorne, of San Francisco; J. C. King, of Banning; A. L. Cothran, of San Jose; G. F. Reinhardt, of Berkeley.

Alternates: R. F. Rooney, C. D. Lockwood and C. A. Dozier.

Councillors: From Councillor Districts from 1 to 9, in the order as follows: Drs. A. S. Parker, H. Bert. Ellis, T. C. Edwards, Geo. A. Hare, J. L. Asay, C. G. Kenyon, E. N. Ewer, Thos. Ross, A. H. Mays; and Councillors-at-Large, as follows: F. B. Carpenter, George H. Evans, F. C. E. Mattison.

Delegates to A. M. A.: Drs. H. Bert. Ellis and Wm. LeMoyne Wills.

Alternates: Drs. G. A. Hare, O. D. Hamlin, H. G. Brainerd and A. W. Morton.

Dr. Harry M. Sherman, San Francisco, then introduced the following preamble and resolution:

Mr. President and Delegates: Charlotte Blake Brown, M. D., of San Francisco, died yesterday, the 19th of April, 1904, aged 57 years. She had been a pioneer woman physician and surgeon of California, and for long a member of this Society, and had been recognized always as a woman of high ideals and definite purpose, and of indefatigable effort in the doing of the things she held good. Her personality and earnestness inspired and accomplished the founding of the Children's Hospital of San Francisco, and she also aided in founding the first Training School for Nurses on the Pacific Coast. In the services of each institution she gave generously, for many years, of her time and means. In the wards of the hospital she achieved a reputation for high professional attainments and ability. She took active part in the founding of the Home for Feeble Minded Children at Glen Ellen, both in the preliminary work in the Legislature and in the Board of Directors on which she served. She was actively interested in the organization of the Associated Charities of San Francisco, and served on its first Board of Directors. In addition to assistance to public charities and institutions she was always ready to help the younger of the profession and the poor of all occupations. In view of these facts it seems fitting that this Society should

Resolve, That it expresses its high opinion of her character and attainments, and appreciation of her

work in life, and that it assures her family and friends that all of its members share in the common grief at her death.

The resolution was unanimously passed by a rising vote.

The following resolution was then introduced and passed:

Resolved, That the Medical Society of the State of California endorses the invitation of the San Francisco County Medical Society to the American Medical Association to hold its session of 1905 in San Francisco, and that the delegates of this Society be instructed to work for this end in accordance with this invitation.

Dr. Emmet Rixford moved to amend Constitution, Art. 6, Sec. 3, by omitting the words "who is not in attendance upon that annual session."

On motion, the report of Business Committee was then received, its recommendations adopted, and the Committee discharged; carried.

Dr. Philip Mills Jones elected delegate to represent this Society in the Association of State Medical Journal Editors, at Atlantic City.

Moved and seconded that component societies be requested to pay 50% of their assessment (fixed at \$2 for the year April, '04 to April, '05) on July 1, 1904; carried.

Minutes read and approved. The president then presented the president elect, Dr. Frank L. Adams, of Oakland, who addressed the House of Delegates. Moved and seconded that House of Delegates extend its thanks to the officers; carried. Announced that Council meet at 8 A. M. Thursday.

Adjournment, 10:35 P. M.

THIRD SESSION, THURSDAY, APRIL 21, 12 M.

The following committees, as under the By-Laws, were elected:

Committee on Scientific Work—Drs. Wallace I. Terry, San Francisco; C. Van Zwalenburg, Riverside (since resigned); George L. Cole, Los Angeles; John C. King, Banning.

Committee on Public Policy and Legislation—Drs. F. B. Carpenter and C. C. Wadsworth, San Francisco, and John Haynes, Los Angeles.

Dr. Philip Mills Jones introduced the following amendments to the Constitution:

Add to Article VI. the following sections:

Sec. 4. The selection of the place of meeting and the election of officers shall be the first order of business of the House of Delegates at the second evening session of each annual meeting.

Sec. 5. All officers shall be elected by ballot and shall serve until their successors are chosen and qualified.

The House of Delegates then adjourned, 12:15 P. M.
GEORGE H. EVANS, Secretary.

REPORT OF THE BUSINESS COMMITTEE.

Your Business Committee begs leave to report as follows:

First. That the organization being carried on throughout the State be continued and be made obligatory.

Second. The report of the Publication Committee has been referred elsewhere. (To a Special Committee.)

Third. We recommend that all delinquent accounts of members who are members of component societies and members-at-large be put in the hands of a collection agency and pushed to settlement. The amount of both classes appears to be \$182.00.

Fourth. We approve the proposed method of auditing the accounts.

Fifth. As there is now no Committee on Medical Education, we therefore recommend that a Special Committee be appointed by the president to confer with a similar committee of the American Medical Association, for we believe that this movement should be National rather than local.

Sixth. We believe that a committee of three on Vital Statistics should be appointed to assist the State Board of Health in this important and heretofore neglected work.

Seventh. We thoroughly agree with the secretary, that the Register should be continued and improved, and if practicable a tri-State Register, as proposed, should be published.

Eighth. We recommend that the assessment upon component societies be made \$2. instead of \$1, as at present.

Ninth. We recommend that the Committee on Tuberculosis be continued, and its work and the work of the League receive the approval and endorsement of this Society.

Second Report of the Business Committee.

The Business Committee, after careful and mature deliberation, recommends that the Society endorse the following:

First Resolution.

The Medical Society of the State of California, in regular session assembled, representing more than three-fourths of the regular physicians in the State of California, respectfully urges the passage by the Senate of the United States, of the bill known as the "Heyburn Pure Food and Drug Bill," H. R. 6295. We believe that the proper and efficient safeguarding of the people of the United States necessitates the enforcement of the standards and requirements embodied in the legislation proposed.

Second Resolution.

Whereas, The value of perfect sight and hearing is not fully appreciated by educators, and neglect of the delicate organs of vision and hearing often leads to disease of these structures, therefore, be it

Resolved, That it is the sense of the American Medical Association that measures be taken by boards of health, boards of education and school authorities, and, where possible, legislation be secured, looking to the examination of the eyes and ears of all school children, that disease in its incipency may be discovered and corrected.

Third Resolution.

In view of the fact that more than 400 deaths from tetanus occurred following the Fourth of July celebration of 1903, as shown by the statistical report elaborated by Dr. S. C. Stanton, of Chicago, and published in the *Journal of the American Medical Association* of August 29, 1903, the great majority of which might have been prevented had proper precautions been taken; therefore, be it

Resolved, That the conclusions which follow, as offered by Dr. Stanton in a paper presented before the Association, at the above meeting, be endorsed as the sense of this Society:

1. Enforcement of existing laws regarding the sale of toy pistols and other dangerous toys.
2. Enactment of laws by the Nation, States and municipalities prohibiting the manufacture and sale of toy pistols, blank cartridges, dynamite canes and caps, cannon crackers, etc.
3. Open treatment of all wounds, however insignificant, in which from the nature or environment there is any risk of tetanus.
4. Immediate use of tetanus antitoxin in all cases of Fourth of July wounds, or wounds received in barn-

yards, gardens, or other places where tetanus infection is likely to occur.

5. As a forlorn hope, the injection of tetanus antitoxin after tetanus symptoms have appeared.

Fourth Resolution.

We recommend the organization of an association to be known as the American Association of State Medical Journals, as outlined in the communication from the secretary of the Kentucky State Medical Association, and approve all the recommendations in that communication.

Fifth Resolution.

We recommend the appointment of a Special Committee of 3 on Vital Statistics, and that such committee coöperate with the California State Board of Health, and with Dr. Cressy L. Wilbur, Division of Vital Statistics, Department of Commerce and Labor.

Respectfully Submitted,

HARRY M. SHERMAN,
W. LeMOYNE WILLS,
J. HENRY BARBAT.

Committee.

Report and recommendations adopted.

REPORT OF THE TREASURER.

Cash on hand, April 1, 1903.....	\$3790.40
Received during the year	5072.80
Savings Bank dividends	59.72
Savings Bank additional dividends	3.82
	<hr/>
	\$8926.74
Disbursements, 101 items on warrants of Secretary	\$8150.22
Paid Union Trust Co. of S. F.	776.52
	<hr/>
	\$8926.74

(Signed) E. E. KELLY, Treasurer.

Dr. E. E. Kelly, Treasurer Cal. State Medical Society:

The undersigned members of the Auditing Committee having examined your books and accounts, are pleased to report that we find them concisely and correctly kept.

E. L. WEMPLE,

April 15, 1904. Chairman Auditing Committee.

REPORT OF SECRETARY.

To the Officers and Delegates of the Legislative Branch of the Medical Society of the State of California:

I herewith submit my annual report:

Pursuant to the policy of the Constitution, the work of the organization of county societies has proceeded energetically during the past year, and since our last meeting fourteen new county societies have been affiliated. They are as follows: Butte, with a membership of 15; Kern, 16; Kings, 9; Mendocino, 20; Merced, 9; Monterey, 20; Napa, 22; San Benito, 10; San Luis Obispo, 14; Santa Cruz, 19; Shasta, 16; Sonoma, 46; Ventura, 15; Yolo, 10, thus giving the Society an increase of 241 in membership through the medium of new societies organized.

Those societies affiliated at the time of the 1903 meeting have, with few exceptions, experienced a gain in membership. This gain is on the whole commendable, and is evidence of active work on the part of officers and members. It is, however, the opinion of the secretary that it could have been greater had more zeal been displayed in some sections. More systematic organization in counties is necessary. Of course the largest increase in membership is, as a rule, seen in the largest societies, as the following table will show:

Society	Gain.	Society	Gain.
San Francisco.....	94	San Joaquin.....	5
Los Angeles.....	75	Santa Barbara.....	5
Alameda.....	24	San Diego.....	4
Santa Clara.....	18	Placer.....	3
Fresno.....	14	Orange.....	1
Humboldt.....	9	Sacramento.....	1

Yuba and Sutter has lost one, and Riverside has lost two, in membership during the year.*

No report on membership has been received from Contra Costa or San Bernardino Societies during the year.

In order to show the comparative activity of the component societies, however, the net gain of each in percentages is necessary:

Society	Members		Gain.
	1903	1904	
Santa Clara	28	46	64%
Humboldt	20	29	45%
Fresno	33	47	42%
Los Angeles	263	278	36%
Santa Barbara	15	20	33%
Alameda	89	113	27%
Placer	12	15	25%
San Francisco	370	464	25%
San Diego	19	23	21%
San Joaquin	26	31	19%
Orange	20	21	5%
Sacramento	44	45	2%
Marin	10	10	0%
Yuba and Sutter	11	10	lost 10%
Riverside	19	17	lost 12%

It is to be hoped that the societies showing no gain in membership will endeavor to increase during the coming year. Eligible physicians reside in these counties whose membership could probably be obtained by personal solicitation. The day is past when the County Society should be considered in any sense a select medical club. The best interests of the profession demand that every effort should be made to enroll every respectable legally qualified practitioner throughout the land, in the regular organization. There still remain districts in which no county organizations exist, and it is to be hoped that the ensuing year will see activity along these lines in such districts.

In my last report I recommended that an amendment to the By-Laws be enacted, adding to the duties of the Board of Trustees the formation of new societies where none exist. This amendment was enacted, and, as a result, most of the organization of new societies during the year has been accomplished by this Board. It is urged that the incoming Board or Council continue this work. The coming year should see every eligible physician in California within our ranks.

The most encouraging feature is the interest taken in the State Society by the component bodies. This is seen in the columns of the JOURNAL, and I do not believe there exists a member who does not appreciate the fact that the JOURNAL keeps the State Society a living issue from month to month. Such interest is necessary to the life and prosperity of any organization. The Publication Committee has expended a great deal of time and earnestness on the JOURNAL, and, with the able supervision of its editor, has made it become, in a short time, a more valuable asset to the State Society than its most sanguine supporters could have anticipated. It is urgently recommended by your secretary that the present policy of the JOURNAL be continued, and that this body provide the necessary funds for the purpose, by an increased assessment on the component societies.

* Mendocino has not sent a delegate. Santa Cruz list of members does not correspond with amount of assessment.

During the year the Society published a Register of the physicians practicing in California. This Register has been distributed to the members gratuitously, and it is hoped that its issuance will be continued. A complete card file of the physicians of the State has been instituted, which will simplify in future the compilation of the Register.

The library has been placed in the rooms of the San Francisco County Medical Society, and is accessible to all members.

Contra Costa and San Bernardino County Societies have failed to send in their annual assessment as required by Article 14, Section 3, of the By-Laws, and are consequently not entitled to representation in this body.

The number of permanent members has decreased, owing to the efforts to enroll them in the membership of component societies. There are six remaining. A committee was appointed by the president to confer with these and endeavor to induce them to join their county societies, which committee undoubtedly has a report ready.

The matter of delinquent members continues to annoy the secretary. One hundred dollars has been collected during the year from this source, but the following members remain delinquent:

A. C. Bothe, T. Coolidge, C. Ford, J. J. Keefe, W. F. H. Osmun, M. Strunsky, S. Trask and A. P. Woodward, of San Francisco; C. W. Evans, Modesto; G. M. Hughes, Mexico; G. W. Otto, Santa Barbara, and H. P. Palmer, Woodland.

These men owe the Society \$93, and as a number of them belong now to affiliated societies, there seems to be no way of compelling them to pay, if they choose to adopt this means of repudiating a debt.

Notices proving useless, the Board of Trustees, during the year, endeavored to persuade them to pay by ordering that the publications of the Society be withheld. An addition has been made to the delinquent list because of members-at-large who have failed to pay this year's dues. This indebtedness amounts to \$84, and, as in the other instance, every effort has been made to collect it. It is to be hoped that some legislation will be enacted at this meeting looking toward a liquidation of this indebtedness.

The number of members-at-large has been decidedly decreased through the growth of component societies, and the organization of new ones. At the present time they number only 58, while at the 1903 meeting there were 119. I believe that energetic work on the part of county society secretaries would cause this list to disappear. Realizing that the contemplated Constitution makes no provision for this class of members, some time ago I sent a letter to each one of them, urging them to affiliate with a component society. I also sent a letter to the secretaries of county societies, giving each a list of the eligible members-at-large and urging them to personally solicit their membership. The result of this invitation has so far been eminently satisfactory, a considerable number having responded.

The Society has lost seven members through death during the year.

The membership of the Society is as follows:

Affiliated members	1446
Members-at-large	58
Total active members	1504
Honorary members	23
Permanent members	6
Total membership	1533

Financial Statement.

Receipts, April 27, 1903, to April 13, 1904:	
Affiliated societies	\$1361.00
Members-at-large	219.00
Delinquent members	100.00
Board of Trustees	25.00
Santa Clara County Society.....	50.00
(Fund for Board of Examiners).	
	<hr/> \$1755.00
Disbursements, April 27, 1903, to April 13, 1904:	
Journal account	\$2007.48
Register account	2771.40
Secretary's and Treasurer's offices.	124.22
Board of Examiners	600.00
Salaries	1650.05
Committees	375.70
Board of Trustees	121.00
	<hr/> \$7649.85

Respectfully Submitted,
 GEORGE H. EVANS,
 Secretary.

We, the undersigned members of the Auditing Committee, have examined the books and accounts of the secretary, and pronounce the same to be correct.

E. L. WEMPLE, Chairman.

REPORT OF THE PUBLICATION COMMITTEE.

To the President and Delegates—Gentlemen:

The Chairman wishes to preface the report of the Publication Committee by expressing his deep gratitude to the members, individually and collectively, for the continuous aid and assistance they have freely and cheerfully given him during the past year. And to the Auditing Committee of the Trustees, for responding to the request made at the first meeting of the Board, last year, that they should audit the accounts of the office each month; this they have done. The Publication Committee met regularly every month and all questions of general policy were carefully discussed before any decision was reached. Particularly does the editor owe these gentlemen thanks for the hearty support given to the policy of excluding unethical advertising, even at considerable financial loss.

The Register of Physicians was issued by the Board of Trustees and this committee had nothing to do with it, consequently no report upon the work that has been done can be made here. We would recommend, however, that in future all publications of whatever sort be issued from the Publication Office, and that provision be made for transacting all the business resulting therefrom in that office. The by-no-means insignificant labors of the past year have been rendered still more arduous by virtue of the clumsy and inefficient machinery provided. The proposed new Constitution and By-Laws, with the addition recommended by the Publication Committee and the auditors of the Trustees, covers the ground sufficiently well and provides ample safeguards. We believe that the Register can be made even more useful and valuable to the members, as the work of compiling the card index progresses more nearly to completion. This work, however, is a never-ending labor and will require the constant attention of a stenographer during the year. The plan of making the Register a tri-State Directory, and including the physicians of Oregon and Washington, has been suggested and considered by the committee. We believe that this can be done and the book supplied to the members of those societies at no extra expense to our own Society. We

would recommend that the Publication Committee be authorized to take such action in the matter as, on further investigation, it deems best.

The STATE JOURNAL, from the time of the first payment made by the Society, in October, 1902, to the 14th of April, 1904, has cost the Society a total of \$3,936.80; the balance of cost has been defrayed from its own earnings. The JOURNAL has issued seventeen numbers, the equivalent of two years' transactions. It has printed 58 papers, read at the State Society meetings, and 55 papers, read at other medical society meetings. In addition to this it has published 131 pages of reports of County and other medical society meetings. The total number of pages printed is 716.

Assuming the membership to be approximately 1500, and taking into consideration the increase in the cost of everything pertaining to the printing trade, it would now cost the Society from \$1,500 to \$1,800 annually to issue the bound volume of transactions in the old form. Thus it is seen that the JOURNAL has cost the Society only a few hundred dollars more than the Transactions would have cost.

In starting the JOURNAL, at the request of the Board of Trustees, the editor clearly recognized two policies, radically different in their scope, for the conduct of such a journal.

The first plan is that which has been pursued by several State societies in the publication of their transactions in journal form. It is, to publish only the papers read at the annual meetings, reports of such County Society meetings as come in, very little editorial matter, and do the whole in as cheap and unpretentious a manner as possible. No effort or expense is undertaken, under this plan, to develop the possibilities of the Journal, nor to secure advertising, nor to make the Journal a particularly desirable advertising medium. Under this plan the amount of advertising secured would always remain small and the Journal continue to be a source of expense of probably \$1,800 or \$2,000 a year to the Society.

The alternate plan was to set pretty high advertising rates; a high standard of ethics for the advertising pages; prosecute an energetic campaign for good, high-class advertising; stimulate organization throughout the State; publish the very best Journal that time and hard work could make; invest more money for the first two or three years than would be called for by the other plan, but eventually secure a self-supporting Publication Office that would not be a source of expense to the Society after the investment of the first few years. This latter plan was adopted as the better business policy.

We have striven hard to accomplish two objects: First, to make the JOURNAL so valuable to the physicians of the State that they would find difficulty in getting along without it. How successful we may have been in this direction remains for others to offer, it could put on, almost at once, at least ten pages of advertising and thus entirely wipe out the deficit in its running expenses. But your Publication decide. Second, to make it so desirable an advertising medium that its pages will be in demand and its advertising receipts increase to the point of self-support. In this direction we have met with greater success than could have been hoped. During the past twelve months we have earned approximately \$2,000; the prospective income for the next twelve months, based upon advertising contracts signed, and not allowing anything for a probable increase in business, exceeds \$4,200; in other words, our business has doubled.

It remains for the House of Delegates to decide whether this policy shall be continued; whether the investment shall be made during the first years of the JOURNAL life and a self-supporting Publication

Office secured. To do this it will be necessary to provide additional revenue for the ensuing year, for, while our revenue is increasing, our expenses will also increase.

If the JOURNAL were to recede from its position in regard to ethical advertising and accept any business Committee believes that to publish the advertisements of secret remedies is not ethical, professional nor honest, and in this ruling it has been sustained by the Board of Trustees, and by resolution of several county societies. We believe that the time has arrived when we may, by continuing the fight against the multitude of abuses which have crept into the domain of materia medica, be the primary cause of effecting a great reform throughout the entire country. The questions involved are too profound to permit of discussion here. It may be said in passing, however, that we have already made a decided impression, though the JOURNAL has been in existence little more than eighteen months.

Your Committee decided at one of its earliest meetings that no paper read at the annual meeting should be published in our JOURNAL, if it had been previously published elsewhere. It is very easy to arrange for simultaneous publication, and if a member wishes his paper published in some journal in addition to his own, he can so advise the Publication Committee, stating the name of the journal in which his paper is to be printed, and we can then arrange with such journal to have the article appear about the same time in both publications. We recommend that you rule upon this matter, stating clearly that all papers read at the meetings become the property of the Society.

The building up and carrying on of the publications of the Society has become a considerable business enterprise. As a suggestion of the amount of work passing through the Publication Office, it may be stated that, since the first of January, 2,707 letters have been mailed. It is impossible to segregate this work and say how much of it is chargeable to the JOURNAL, how much to the Register, and how much to organization work. The JOURNAL office is used as the central office of the Society. Its committees and trustees meet there, and the work of compiling the card file of physicians and the data for the next issue of the Register is placed there. Thus many expenses appearing against the JOURNAL should appear against the Society or against the Register. Thus it is hardly fair to charge office furniture, typewriter, etc., entirely to the running expenses of the JOURNAL when they are really expenses of the Society as such.

At the November meeting of the Trustees the editor was requested to take charge of the distribution of the Register and the compilation of data for the next one. For this purpose he was allowed a stenographer. Following the example of the New York Association, this work has been entirely turned over to the stenographer, and is rapidly going forward. The limit fixed by the Trustees (\$40 per month) is not sufficient to keep a first-class stenographer, and the one at present on the work had, previously to coming to our office, been receiving \$50 per month. The salary allowed for this purpose should be increased to this amount.

While, in theory, the editor has been receiving \$75 per month, he has in fact received nothing, for all of this money has been paid to Mr. J. J. Harrison, the business manager, whose time has been fully occupied and whose services are both underpaid and absolutely essential. The chairman of your Committee, as editor of the JOURNAL and as Trustee, has devoted all of his time since last August to the work of the Society, its organization and its publications, and has cheerfully done so without recompense. He cannot, how-

ever, continue to do so for the ensuing year, unless provision is made for at least partially paying for his time.

The estimated expenses and income of the Society for the following year are as follows:

Expenses.			
Salary of Secretary	\$	400.00	
Expenses of meeting		200.00	
Journal and stationery		3000.00	
Register printing		850.00	
Salaries, editor, manager and stenographer		3000.00	
Distribution		275.00	
Office expenses		300.00	\$8025.00
Estimated Income.			
Advertising, Register, net.....	\$	2000.00	
Advertising, Journal, commis., already paid; contracts signed, and no allowance for renewals or new business		4200.00	\$6200.00
Deficit to be met by State Society			\$1825.00

In conclusion, your Committee would most earnestly recommend that some simple and safe business plan be formulated at this meeting, whereby the business of the Society may be expedited.

Respectfully submitted,

PHILIP MILLS JONES,
GEORGE H. EVANS,
C. D. McGETTIGAN,
G. F. REINHARDT,
HARRY M. SHERMAN,
Committee.

Dr. Philip Mills Jones, Editor CAL. STATE JOURNAL OF MEDICINE:

The undersigned, members of the Auditing Committee, have examined your books and accounts, and must compliment you for the methodical and business-like method used in conducting the affairs of the JOURNAL. We have been able to rapidly note your collections and disbursements, finding all correct and in perfect order.

E. L. WEMPLE,
Chairman Auditing Committee.

Report of the Special Committee on the Report and Recommendations of the Publication Committee.

Your Committee, to whom was referred the report of the Publication Committee, recommend the adoption of the report, together with the following resolutions which are germane to the subject matter therein contained:

Resolved, That the Publication Committee, with the sanction of the Council, be authorized to exercise its discretion in regard to the establishment of a tri-State Directory, if such can be done without expense to this Society.

Resolved, That the House of Delegates hereby advise its Council to employ for the ensuing year:

An editor, at a salary not exceeding \$1500 a year.
A business manager, at a salary not exceeding \$1000 a year.

A stenographer, at a salary not exceeding \$600 a year.

Respectfully submitted,

F. B. CARPENTER,
ROSE T. BULLARD,
JNO. C. KING,
Committee.

Report and recommendations adopted.

REPORT OF MEMORIAL COMMITTEE.

J. LAMBERT ASAY, M. D., Chairman.

There comes a time in our deliberations when the busy cares of associational work and the consideration of scientific problems should be laid aside for a few brief moments, that we may hearken to the voice of sorrow and pay tribute to our dead. It is a time when it becomes us, in the sincerity of our feelings, to bow our heads in reverential remembrance of our companions who have gone out from the mists and fogs of the valley to the sunshine of the eternal highlands.

We cannot roll away the stone at the door of the sepulchre and bid each solemn, silent tenant come forth, but, standing here, we can picture to the mind our brethren as they were, and render homage to their worth. We can look back, and by looking back recollect and cherish all the good and pure with which we knew them to be possessed. Turning the leaves of memory's book, we will forget no single virtue, but taking from it that page whereon might be inscribed the slightest of human imperfections, leave naught but the golden verse which makes us realize that this world is the better for their having lived in it.

To offer consolation to the bereaved families would be but formal and ineffectual, since such a gift descends only from heaven. Time has, however, no doubt, softened the first deep anguish of those nearer and dearer than ourselves. Nevertheless, it is meet for us, at this time, to give expression to our sympathy for the wife and children who have been so sorely stricken. It is only on occasions like this that we, as a body of which the deceased were beloved members, have the opportunity to offer solace to their grief, and to reveal to them the high esteem and deep affection held in our hearts for our late brethren.

The life of the physician is by no means conducive to longevity. Every step in his pathway is beset by hazard. Each sleepless night, every anxious vigil over disease and suffering, the repeated drafts upon the vital forces by the conscientious discharge of duties, are sure to lessen the number of his days. Yet though the sum of his years be few, there is condensed in this short life more ripened experience and a greater familiarity with human nature and impulses, than is given to those of other pursuits or professions who have reached beyond their three score and ten.

It is to be regretted that more extended notice of some of our deceased members cannot be here given. In these instances it has been impossible for your Memorial Committee to secure such histories as to permit other than mere mention. By this omission, however, it must not be supposed that our friendship in life was less warm, their associations less genial, or the influence of their daily lives in any measure unappreciated, or less worthy of recognition. They, too, abide in our memories.

Of these deaths, the following are announced:

J. J. Flood. He received his degree from the Medical Department of the University of California, July 13th, 1895. He was assistant in orthopedics in the clinics of that college. He joined the San Francisco County Medical Society, March 8th, 1893.

C. H. Roese. Graduated from Cooper Medical College, December 6th, 1894. Joined the San Francisco County Medical Society, May 13th, 1902. He was for several years resident physician at the German Hospital in that city.

T. Byron DeWitt. Graduated from Rush Medical College, Illinois, January 17th, 1872, and came to California in 1876. He was one of the oldest living members of the San Francisco County Medical Society, with which he was connected from August 24th, 1880, to the time of his death.

Julius A. Crane. The saying that death loves a shining mark has been exemplified in the taking away of our friend and associate, Dr. Julius A. Crane, though little over two score years of age. He was born on the 21st day of January, 1854, and died June 6th, 1903. He received his degree of Doctor of Medicine from Charity Hospital Medical College, Ohio, February 24th, 1870, after which he entered practice. In recognition of his fitness, he was appointed assistant superintendent of the Iowa State Hospital for the Insane, which position he filled from 1873 to 1875, when he removed to California, and a year later located in Santa Ana. On March 15th, 1882, the Medical Department of the Western Reserve University of Ohio, bestowed upon him the ad-eundem degree. In 1889, he was appointed superintendent of the State Hospital for the Insane at Agnews, Santa Clara County, and served in that capacity to the time of his death. To his memory nothing more fitting can be said than the tribute paid by his professional brethren of the Orange County Medical Society, of which he was at one time its honored president, and from which the following extract is taken:

"Dr. Crane was a man of high moral character, a gentleman and physician of true and generous impulses, a colleague worthy of confidence and esteem, and a competitor upon whose ethical sense and manly courtesy one might forever rely. His sterling worth, his clean private and professional life during his long residence of more than a quarter of a century in the Santa Ana Valley, had endeared him to a host of friends, not the least appreciative of whom are those members of this Association who have been for the longest period his fellow-workers in the profession of medicine. When called by the State of California to a position of responsibility and honor as superintendent of the Insane Hospital at Agnews, it became a matter of pride for us that he brought to that position a special fitness and an integrity of purpose that rendered his administration an unusually successful one, and enabled him to retire from what proved his last labor in his profession with a full assurance of a faithful service and duty well done."

Millard Maybee. Millard Maybee, M. D., C. M., was a member of the Riverside County Medical Society. He was born on the 15th day of February, 1856, at Kingston, Ontario, Canada. He received his early education at the Academy in Napanee, Sydenham High School, and the Normal School at Ottawa. He taught school for six years, after which he attended Queen's College, Kingston, graduating in medicine therefrom April 25th, 1887. He practiced medicine at Milford, Ontario, for four years, and came to Riverside in the spring of 1891, where he followed his profession until March, 1903, when he contracted pneumonia, which was followed by mastoiditis and cerebral meningitis, which caused his death on the 10th day of June following. He left a widow and one daughter, with whom we sympathize in their bereavement.

Charles Brooks Brigham. On the 24th day of August, 1903, Dr. Charles Brooks Brigham passed to his rest, at the age of fifty-eight years.

Dr. Brigham was a native of Boston, and received his early education in that city. He was a graduate of the Boston Latin School, and was given his Bachelor degree by Harvard University in 1866, and from the latter institution he was also graduated Doctor of Medicine in 1870. During his last year in the medical department of this University, he filled the position of house surgeon of the Boston City Hospital. Desiring to familiarize himself with military surgery, he went abroad and served during the Franco-Prussian war as surgeon-in-chief of the ambulance L'Ecole Forestier. In 1873 he came to California, and engaged in practice of his profession in San Francisco. From 1875 to 1879 he was surgeon of the French Hospital,

and at the time of his death was one of the surgeons of St. Luke's Hospital. He was an honored member of the San Francisco County Medical Society, and corresponding member of the Society of Medicine of Nancy, France. He was also a Chevalier of the Legion of Honor of France, and a Knight of the Order of the Crown of Germany. A widow and three children mourn his loss.

Louis A. Kengla. Once again with lighted taper the Angel of Death visited among us, and gently took away our beloved friend and associate, Dr. Louis A. Kengla, to a life in the Eternal Home. The summons found him ready for the great change which he had realized for many days to be inevitable.

The heart that had beat for humanity, for all that is high and holy in our councils, has ceased to throb. His was a spotless life. His many virtues shone as a cluster of jewels in a setting of manly honor. Truly it can be said of him that as a man he was just and pure, sincere in all his doings, patient, amiable, kind and loving. True to himself, faithful to his profession, he is entitled to our grateful and honorable remembrance.

Dr. Kengla was a native of Washington, D. C. He received his medical degree from the University of Georgetown in 1886. Three years later he came to California and was thereafter engaged in general practice. He was president of the San Francisco County Medical Society last year, and had been secretary of the California Academy of Medicine for several years. He was married to Miss O'Kane, daughter of a prominent San Francisco merchant. His death, which occurred on the 26th day of March last, was undoubtedly hastened by overwork. His widow, three daughters and a son mourn the loss of husband and father.

For nearly five years Dr. Kengla was one of the editors of the *Occidental Medical Times*, in which high class magazine he held a proprietary interest. As a scholar and writer he was pre-eminent; wise and candid in his sayings, incisive and fearless when duty prompted. His pen was ever wielded in the majesty of truth and right against wicked attempts to debase and degrade our profession. His able editorials and the mighty influence they possessed, did much to protect our integrity from the assaults of designing and unscrupulous foes. He was chosen a delegate by his County Society to represent San Francisco with its other representatives at this meeting. We sadly miss his mature judgment, his knowledge of our needs, and, greatest of all, his safe counsels. His work has been well done, and now, weary and tired, he has laid down his burden and rests in peace.

How shall we apply the lesson of this memorial hour? May we not derive inspiration from the good works and generous natures of our departed brethren? Can we not profit by their examples of study and conquest? Shall we not gather the richer treasures of their life's experiences and add new luster to the gems? Like them, shall we not love right for its true and proper value, and remember, too, that our profession is only noble so far as we ennoble ourselves? Then let our part be the struggle and mastery of self; the development and ripening of the intellectual powers; the constant growth of every faculty of our being, wooing from knowledge her hidden secrets, brushing away the cobwebs of ignorance and superstition, the rust and corrosion of time, working today for the triumphs of the morrow. If we would wear the laurels we must win and merit them by our own efforts.

"To live nobly and in life to act greatly," the ancients said, "was to be like unto the gods, and so men ascended to the stars."

REPORT OF THE COMMITTEE ON PERMANENT MEMBERS OF THE STATE SOCIETY IN RELATION TO THE GENERAL PLAN OF RE-ORGANIZATION.

The Committee appointed for the purpose of bringing the permanent members of the State Society in line with the scheme of organization, begs to report as follows:

The list of permanent members appearing in the Transactions for 1901 was taken as a basis. This list includes 25 names. Of these, 11 have passed away, and of the survivors five have retired from active practice, while nine are still hard at work. Of the five retired none were in active affiliation with a local society but one, Dr. W. R. Cluness, a past president, was an honorary member of his former local Society. This situation suggested a way out of the difficulty as far as the retired members were concerned, and efforts were at once made to have them affiliated as honorary members. In accordance therewith, Dr. C. B. Bates of Santa Barbara was elected an honorary member of the Santa Barbara County Society, and Dr. S. J. S. Rogers of Marysville, of the Yuba and Sutter County Medical Society. Efforts were made to have Dr. Harrison Neal of San Miguel elected to honorary membership in the San Luis Obispo County Society, but so far without success.* In the case of the remaining member, Dr. C. Cushing, his notice of retirement came too late for application to the San Francisco County Society, to which, however, he is eligible on the same basis.† Of the nine members in active practice, all but one are members of their local societies. This member's attention was called to the necessity of affiliation with his local Society, but without success. The Committee recommends:

1. That for the purposes of organization, honorary membership in a local society, in the case of permanent members who have retired from active practice, be regarded as equivalent to active membership, the local society, in each case, providing the regular annual assessment to the State Society.

2. That, in the case of Dr. C. Cushing, formerly of San Francisco, and Dr. Harrison Neal of San Miguel, the secretary be instructed to communicate with the secretaries of their respective local societies and urge that they be elected to honorary membership.

3. In the case of the one member in active practice who is not in affiliation with his local society, no recommendation is offered, there being a clause in the new Constitution and By-Laws which, if adopted, will provide for it. (Signed)

JAMES H. PARKINSON, Chairman,
C. G. KENYON,
PHILIP MILLS JONES,

April 18, 1904. Committee.

A list of permanent members, showing the status in each case, is herewith appended:

List of Permanent Members of the Medical Society of the State of California, Appearing in the Transactions for 1901, Revised and Corrected to Date:

Bates, C. B., Santa Barbara; retired; honorary member Santa Barbara County Medical Society.

Chesley, C. P.; deceased.

Clark, Asa, Stockton; member San Joaquin County Medical Society.

Cluness, W. R., San Francisco; retired; honorary member Sacramento Society for Medical Improvement.

Cole, R. B.; deceased.

Cushing, C., San Francisco; retired.

Ellinwood, C. N., San Francisco.

Flint, Thos., San Juan; member San Benito County Medical Society.

* Elected an honorary member since this report was made.

† Died May 11, 1901

Foote, E. N.; deceased.
 Gibbons, H. Jr., San Francisco; member San Francisco Medical Society.
 Gibbons, W. P.; deceased.
 Hunt, R. M.; deceased.
 Jones, W. C.; deceased.
 Lane, L. C.; deceased.
 Murphy, R. W.; deceased.
 Neal, Harrison, San Miguel; retired.
 Robertson, E. B.; deceased.
 Rogers, S. J. S., Marysville; retired; honorary member Yuba County Medical Society.
 Ross, Thos., Sacramento; member Sacramento Society for Medical Improvement.
 Shurtleff, B., Napa; member Napa County Medical Society.
 Shurtleff, G. A., Stockton; deceased.
 Simmons, G. L., Sacramento; member Sacramento Society for Medical Improvement.
 Thorne, W. S., San Francisco; member San Francisco County Medical Society.
 Todd, F. W.; deceased.
 Todd, T. M., Auburn; member Placer County Medical Society.

MEMBERS WHO REGISTERED.

The following is the list of members in attendance at the last meeting of the State Society, Paso Robles, April 19-21, who registered. There were a number who did not register. In future it will be necessary for every one to register, in order to take part in any of the proceedings:

H. Bert, Ellis, Los Angeles; George H. Evans, San Francisco; W. J. G. Dawson, Eldridge; H. S. Orme, Los Angeles; Carl Krone, Oakland; Kate Wilde, Los Angeles; Chas. F. Miller, Gardena; Thos. Ross, Sacramento; R. F. Rooney, Auburn; F. C. E. Mattison, Pasadena; R. W. Miller, Los Angeles; J. Rosenstirn, San Francisco; C. G. Kenyon, San Francisco; N. K. Foster, Sacramento; Martin Regensburger, San Francisco; Ernest Johansen, San Francisco; W. W. Beckett, Los Angeles; W. LeMoine Wills, Los Angeles; J. L. Carson, Bakersfield; Chas. E. Winslow, Bartlett Springs; Kate P. Van Orden, Alameda; A. S. Parker, Riverside; H. G. Brainerd, Los Angeles; Claire W. Murphy, Los Angeles; ——— Hunkin, San Francisco; F. B. Carpenter, San Francisco; J. Henry Barbat, San Francisco; E. L. Wemple, San Francisco; Frank Garcelon, Pomona; Harry M. Sherman, San Francisco; Lincoln Cothran, San Jose; Geo. F. Reinhardt, Berkeley; Ethel L. Leonard, Los Angeles; Wm. F. Snow, Stanford University; Chas. C. Browning, Highland; L. M. Powers, Los Angeles; C. Van Zwalenburg, Riverside; Wm. H. Flint, Santa Barbara; Jno. C. King, Banning; Dudley Tait, San Francisco; Philip Mills Jones, San Francisco; O. K. Stafford, Santa Ynez; P. C. H. Pahl, Los Angeles; W. H. Roberts, Pasadena; W. B. Stephens, San Francisco; Barton J. Powell, Stockton; Hayward G. Thomas, Oakland; Chas. C. Wadsworth, San Francisco; J. J. Knowlton, San Luis Obispo; Alfred B. Grosse, San Francisco; Wm. Ellery Briggs, Sacramento; B. F. Church, Los Angeles; Alfred Eichler, San Francisco; F. M. Pottenger, Monrovia; James T. Watkins, San Francisco; A. H. Pratt, Oakland; W. T. Lucas, Santa Maria; Anna M. Mosgrove, San Francisco; Margaret H. Smyth, Stockton; Martin H. Fischer, Berkeley; R. O. Dresser, Paso Robles; W. E. Bates, Davisville; H. S. Gordon, Santa Ana; E. E. Kelly, San Francisco; Lula T. Ellis, Los Angeles; Rose T. Bullard, Los Angeles; Wallace I. Terry, San Francisco; Alexander S. Lobingier, Los Angeles; T. C. Edwards, Salinas; Fred Baker, San Diego; Charlotte

J. Baker, San Diego; C. S. G. Nagel, San Francisco; Kaspar Pischel, San Francisco; Geo. L. Eaton, San Francisco; Edward von Adelung, Oakland; Chas. H. Dozier, San Francisco; H. M. Cox, San Luis Obispo; J. L. Milton, Oakland; H. J. B. Wright, San Jose; W. T. Maupin, Fresno; Chas. A. Dukes, Oakland; R. L. Hogg, Saratoga; J. W. Graham, Lompoc; Emmet Rixford, San Francisco; George Blumer, San Francisco; A. Barkan, San Francisco; Geo. Chismore, San Francisco; Geo. L. Cole, Los Angeles; E. H. Woolsey, Oakland; W. F. McNutt, San Francisco; M. Krotoszyner, San Francisco; E. L. Paulding, Arroyo Grande; H. A. L. Ryfkogel, San Francisco; Pauline S. Nusbaumer, Oakland; D. Brumwell, King City; A. H. Mays, Sausalito; R. W. Brown, Nipomo; J. H. Love, Ventura; A. J. Sanderson, San Francisco; J. F. Lilley, Oakland; J. A. Black, San Francisco; O. Stansbury, Chico; R. L. Rigdon, San Francisco; E. G. Frisbie, San Francisco; J. M. Shannon, Oakland; Edward N. Ewer, Oakland; J. H. Tebbetts, Hollister; A. W. Morton, San Francisco; T. C. McCleave, Berkeley; J. Maher, Oakland; M. A. Austin, San Francisco; R. T. Stratton, Oakland; Henry H. Sherk, Pasadena; Chas. D. Lockwood, Pasadena; J. Lambert Asay, San Jose; Wm. F. Barbat, San Francisco; C. H. Bulson, Lincoln; C. W. Pierce, Los Angeles; J. H. Davisson, Los Angeles; G. A. Hare, Fresno; Frank L. Adams, Oakland; Thomas Morton, San Luis Obispo; J. P. Dunn, Oakland; Mariana Bertola, San Francisco; H. C. Bagby, Santa Maria; J. S. Jackson, San Luis Obispo; Henry Gibbons Jr., San Francisco; P. J. Parker, San Diego.

DEATHS.

Dr. Clinton Cushing, for many years a member of the staff of Cooper Medical College, died May 11th, in Washington, D. C., in which city he had a home where he spent part of each year. Dr. Cushing came to Oakland in 1867 from Chicago. He graduated from Rush Medical College in 1865, and had been a member of the Medical Society of the State of California for over twenty years. The San Francisco County Medical Society elected Dr. Cushing an honorary member at the May meeting, in recognition of his attainments, and in order that he might have retained his membership in the State Society, as he had become a "permanent" member, a class not provided for in the new constitution.

Dr. Hugh Hamill Davis died at his home at Sonoma on May 8th, at the age of 62. Dr. Davis was born in Pennsylvania, and upon graduation from high school joined the Union army, and served during the Civil War. After the war he entered the medical department of the University of Pennsylvania, and graduated in 1868. He came to California soon after, and after serving as an army surgeon for several years, in 1884 settled in Sonoma county. He was resident physician at the Home for Feeble-Minded at Eldridge, 1891-92, since which time he was a resident of the town of Sonoma. Dr. Davis was a charter member of the Sonoma County Medical Society. Dr. Mallory, secretary of that society, in reporting the death of Dr. Davis, writes: "The society loses an honored member and the community a good, faithful and conscientious adviser."

Dr. Roberdeau Harmon of Oakland died of heart disease May 18th. His dead body was not found until Saturday, the 21st, when it was discovered in the back office of Dr. H. E. Muller, whose practice he was attending to during Dr. Muller's absence in the East. Dr. Harmon graduated from the Medical Department of the University of California in 1879, and was licensed in 1880.

MEDICAL SOCIETY MEETINGS.

Alameda County.

Regular meeting, May 10, 1901. President Dr. J. Maher in the chair.

"Endocarditis." Dr. T. J. Clark of Berkeley presented a paper on this subject, in which he brought out the important points in regard to the disease, and exhibited a patient presenting the following history: L. B., a girl 11 years old; family history free from rheumatism. In November, 1900, she had her first attack of articular rheumatism, the hips, knees and ankles being involved. She was confined to her bed for three weeks, when the pain and fever subsided, but an anemic condition persisted, and she did not recover her strength completely. From this time she was comparatively well until the following May, when she had her second attack, the wrists and elbows being involved. In September, 1901, I first saw her. She then had arthritis of the wrists and ankles, a temperature of 103 degrees, pulse 120, and was very anemic. Examination of the heart disclosed a soft blowing, systolic murmur at the apex, replacing the first sound. A diagnosis of rheumatism with endocarditis was made, and the patient given absolute rest in bed, where she was forced to remain for five months. During the first three months the heart's action was rapid and tumultuous, but this was controlled by the ice bag. After this time the patient steadily improved, and has had no return of the heart symptoms or rheumatic trouble. The patient was exhibited, and on close examination no cardiac murmur was discovered.

The discussion was opened by Dr. F. L. Adams, who emphasized the difficulty of the diagnosis of rheumatism in children, the symptoms often being slight or unnoticeable, and a cardiac murmur discovered later.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

California Academy of Medicine.

The regular meeting of the Academy of Medicine for April was held on Tuesday, the 23rd, at the Philomath Club rooms; Dr. Thos. W. Huntington, the president, in the chair. Dr. Howard Morrow presented a patient with a tumor of the right side of the jaw which had developed rapidly within the past few months. When first seen the tumor was thought possibly an echinococcus cyst; examination of the small yellowish granules in the pus did not support this theory. Later, the diagnosis of carcinoma (inoperable) was made. Exposure to X-rays had given relief from pain and slightly reduced the size of the mass, but metastasis had appeared in the neck. The paper was discussed by Drs. Huntington, Barbat, Montgomery and Morrow, the general opinion being that operations upon cancerous growths of this sort, in the region of the head, neck or face, were almost without exception, unsatisfactory.

Dr. Henry Krentzmann read a paper on "Transverse Supera-Pubic Division of the Skin Applied for Simultaneous Performance of Intra-abdominal or Intra-pelvic Operations and Inguinal Shortening of the Round Ligaments." He reiterated his previously expressed condemnation of the ventral suspension or ventral fixation operation in the majority of cases; he thought it only justifiable in a very few carefully selected cases. The operation described, however, he thought had everything to recommend it, when indicated and properly performed. The paper was discussed by Drs. Moss, Brunn, Barbat and Krentzmann.

Dr. D. W. Montgomery read an interesting paper on "The Statistics of Chancere," covering his clinical experience with syphilis during the past fourteen years. The deductions were both interesting and valuable, but cannot be done justice in a brief abstract.

On motion, a committee of three was appointed to draft resolutions upon the death of the late secretary of the Academy, Dr. Louis A. Kengla.

Dr. A. W. Hewlett was elected secretary to fill the unexpired term of office.

Humboldt County.

The regular meeting of the Humboldt County Medical Society was held in Eureka on May 10th, Dr. Sinclair presiding. The paper of the evening was read by Dr. Louis P. Dorais of Eureka on "Phlyctenular Keratitis," a copy of which is inclosed.

G. N. DRYSDALE, Secretary.

Orange County.

The Orange County Medical Society held its annual meeting and banquet at Elks' Hall, Tuesday evening, May 3rd. There were fifteen members and twelve ladies present. After reading the minutes and the annual reports, the retiring president, Dr. Freeman, delivered his address, the subject being "Preventive Medicine." He especially handled the Legislature without gloves, and denounced the custom of making health boards political appointments. The officers elected (See JOURNAL, May, page 166.) were installed. All repaired to the banquet-room where the company enjoyed a feast, interspersed with toasts, and had a general good time, characteristic of these annual meetings in our Society.

H. S. GORDON, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. W. A. Briggs on March 17th, it being also the annual meeting of the Society.

The following members were present: Drs. Atkinson, Baldwin, W. E. Briggs, Cartwright, Cox, Duffey, Hatch, Henderson, James, Look, McGavern, McKeen, Nichols, Parkinson, Ross, G. C. Simmons, G. L. Simmons, S. E. Simmons, Strader, Twitchell, G. A. White, J. L. White, Wright, Wilder, Foster and Wheeler, and special guests of the Society, Drs. Herbert C. Moffitt, of San Francisco; W. E. Bates, of Davisville; Drs. Miner and Hamilton, of Sacramento.

The secretary and treasurer's report was read and accepted, and ordered placed on file.

The president then made an address summing up the work of the year, giving also a brief history of the Society. Election of officers was then proceeded with, with the following result: President, Dr. A. M. Henderson; secretary and treasurer, Dr. J. W. James; directors (5), Drs. H. L. Nichols, G. L. Simmons, W. A. Briggs, A. M. Henderson and J. W. James; delegates to the State Society (2), Drs. Jas. H. Parkinson and W. E. Briggs; alternates, Drs. S. E. Simmons and A. M. Henderson.

The newly elected president then took the chair and the regular business proceeded. Dr. G. A. White reported a case of Cholethiasis, the gall bladder containing atheromatous concretions resembling gall stones.

The paper of the evening was read by Dr. Herbert C. Moffitt of San Francisco, on "Some Unusual Forms of Exophthalmic Goitre; their Diagnosis and Treatment." The discussion was opened by Dr. W. E. Bates, of Davisville, and Dr. S. E. Simmons, and participated in by many present.

A motion was made to the effect that Dr. Moffitt be given the thanks of the Society for his kindness in

visiting the Society and presenting so valuable a paper. The motion was carried by a unanimous vote.

Meeting then adjourned.

The Sacramento Society for Medical Improvement met in regular session on April 26th, at the office of Dr. Nichols. The president, Dr. Henderson, being absent, Dr. Nichols occupied the chair. The following members were present: Drs. W. E. Briggs, Hanna, Hatch, James, Krull, McGaveren, McKee, Nichols, Parkinson, Ross, G. C. Simmons, G. L. Simmons, S. E. Simmons, Strader, Sutliff, Twitchell, J. L. White, Wright and Wheeler, and by invitation Dr. Williams of Nevada.

A communication was received from the secretary of the Canadian Medical Society, inviting the Sacramento society to attend the meeting of the Canadian Medical Society at Victoria, in August. A motion was made that the secretary return the thanks of the Sacramento society for the courtesy of the invitation. Motion was carried.

An application for membership was received from Dr. Hamilton, which was allowed to take the usual course.

Dr. Parkinson, delegate to the State Society, then made his report.

A motion was then made that a committee be appointed to frame resolutions relative to segregating the different schools of medicine in the State Register of Physicians, also the irregular, the resolutions to be sent to the Council. Motion was carried.

The committee drafted the following:

Whereas, There was published in 1903, by the publication committee of the Medical Society of the State of California, a Register and Directory of Physicians and Surgeons practicing in the state; and

Whereas, The said publication shows a departure from the plan of former registers in its arrangement and classification; therefore be it

Resolved, That we protest against said innovation, and respectfully ask the committee on publication of our State Society to compile future registers upon the plan of placing the name of each practitioner of medicine and surgery under the caption to which he or she belongs, and that due care be exercised in eliminating the names of disreputable physicians, without regard to the fact of their holding a state license.

Dr. Nichols then entertained the society with many profitable and interesting reminiscences.

J. W. JAMES, Secretary.

San Francisco County.

The regular monthly meeting was called to order at 8:30 o'clock, May 10th, President Rosenstirn in the chair.

The minutes of the previous meeting were read and approved.

Propositions for membership: Drs. Charles Downes, D. F. Ragan, H. T. Rooney, J. H. Soper, Henry du R. Phelan, F. H. Ainsworth, J. de Chautreau.

The following papers were presented to the society:

Chronic Nephritis—"Pathology," Dr. William Ophüls; "Medical Treatment," Dr. J. Wilson Shiels; "Surgical Treatment," Dr. J. Henry Barbat.

The amendment to the by-laws introduced last month was adopted.

A communication from the secretary of the State Society was read with reference to payment of one-half the yearly dues. Motion made and carried that the request be granted.

It was moved and seconded that Dr. Clinton Cushing be elected an honorary member of this society; passed.

Dr. Philip Mills Jones offered the following amendments to the constitution and by-laws:

Substitute the following for Article III of the constitution:

MEMBERS.

Every legally registered physician residing and practicing in the County of San Francisco, who is of good moral and professional character and standing, and who does not support or practice, or claim to practice, any exclusive system of medicine, shall be eligible for membership. Applicants for membership shall be proposed in writing at a stated meeting, by two members of the society; their names shall be conspicuously posted in the library of the society until the next regular meeting; they shall exhibit to the committee on admissions a certificate from the Board of Medical Examiners of the State of California, or other evidence of a legal authorization to practice medicine within the State of California. Membership will be conveyed by the announcement, at a regular or stated meeting, by the president, of a favorable report from the committee on admissions.

Physicians temporarily residing in San Francisco, and physicians connected with the Army, Navy and Public Health and Marine Hospital Service, will at all times be welcomed as guests of this society.

Amend Article III of the by-laws, page 7, lines 10 and 11, by striking out "one week," and substituting therefor the words "three weeks"; line 14, by striking out the words "board of trustees," and substituting therefor the words "house of delegates."

Amend Article XV of the by-laws by striking out the word "due," page 13, line 8, and substituting therefor the words "thirty days," and inserting after the word "notice" the words "by registered mail addressed to his last known address"; on line 9, by striking out the word "may," and substituting the word "shall"; by striking out all of the same sentence following the word "roll."

Discussion on Nephritis.

Dr. George H. Blumer—The subject has been taken up so thoroughly that there is very little left to discuss. In the first place, with regard to the cause of death in these cases. In some forty or fifty autopsies which I have done in the last six or seven years, I have found that at least 60 per cent did not die from uremia, but died from secondary bacterial infection. Another point which Dr. Ophüls brought out, and a point which is not well appreciated as it should be, is the question of albuminuria in chronic interstitial nephritis. Urine should be examined repeatedly, and also taken at different times of the day. The general practice is to examine it early in the morning, but in a great many cases of chronic nephritis that sample will fail to show albumin where later in the day it will show it. The same thing is true of casts. In a great many instances the casts appear only intermittently, and it may be necessary to examine often. It has been too much the custom to diagnose every case which presents albuminuria, as Bright's disease. I have had urine sent to me with a diagnosis of Bright's disease simply because albumin and perhaps a few casts are present. This is especially apt to occur in cases of arterio-sclerosis, or heart disease, where chronic passive congestion of the kidneys causes albumin and casts. I think that there is no such thing as physiological albuminuria. Dr. Ophüls stated that many of these patients go on to old age; but there is a very great difference of opinion in this matter. I think it is possible to interpret Dr. Pierce's work as applicable to human pathology. He was unable to produce nephritis in dogs through primary inoculation, but it is said that by injecting the serum of dogs who had nephritis into other dogs he was able to produce nephritis. I believe that in connection with nephrotoxin work there is a possibility of some therapeutic results. With regard to the relation of nephritis to arterio-sclerosis I agree with the opinion to ascribe the majority of cases to arterio-sclerosis. From the pathological view there is very little excuse for decapsulation of the kidney for chronic nephritis. The subject has been attacked experimentally by Johnson and others, who have shown no pathological explanation for the results achieved. The capsule reforms, thicker than originally, and no collateral circulation is formed. The great claim of Edebohl has been that the benefit was due to the formation of the collateral circulation. Probably the relief of pressure is most important. We should always take into consideration the fact that a certain amount of blood is lost at these opera-

tions, and blood letting has a favorable effect on nephritis. It seems rational to think that after this operation for decapsulation, when the new capsule has formed the last condition of the patient will be worse than the first. I do not see any reason to believe that the newly formed tissue will act different than any other newly formed tissue.

Dr. George H. Evans—I regret that with these papers we have not had anything said on the diagnosis of this disease. It would bring out a general discussion in particular on albuminuria. Dr. Blumer has reviewed Dr. Ophüls' paper very thoroughly. I am glad that Dr. Shiels has mentioned that we are no longer resorting to milk diet. Instead of diet which is saving the kidney, it is irritating it. I was pleased with the extremely conservative paper of Dr. Barbat. No one can look over the tabulated reports of cures by decapsulation of the kidney without being impressed by the inconsistency between the symptoms as recorded in these reports and the diagnoses made. Take the cases that show by the symptoms that they are real cases of nephritis and you are struck by the uniform fatality. Most are not cases of nephritis at all, but cases of movable kidneys. They are relieved of all the symptoms and go on to cure.

Dr. H. Harris. In connection with the papers read here this evening I brought this patient on whom decapsulation has been performed. This patient was first seen about one year ago. He was taken sick in May, 1905, and came to us in June at the Cooper Medical College. When first seen there was only one way to describe his condition. He was water-logged. The visual orifice was swollen, and he could barely see; the skin was literally bursting. For one month the patient made no progress, although he had vigorous treatment. The urine did not vary very much. The urine decreased in amount varying from 130 to 150 cc. High specific gravity, red in color, large number of hyalin, leukocytes, epithelial casts. Very large number of fatty casts, renal epithelium, leukocytes and red blood cells. Another one month did not improve, in spite of treatment, liquid diet, rest in bed, sweat baths and ice enemata. Finally he began to improve. At the end of two and a half months he left the hospital. We sent him home and put him on vegetable diet, with one or two eggs a day. He grew worse, and at the end of six weeks was in the same condition as when first seen. In November the patient again returned to the ward, worse than when first seen. The diagnosis was of chronic parenchymatous nephritis. He was treated for one month unsuccessfully. At times he voided 100 to 150 cc. per day, very rich in albumin, as much as 3 per cent. Enormous number of casts. Dr. Stillman operated December 16th, doing a bilateral decapsulation of the kidneys. For one month after the operation the patient's condition was about the same. The patient was then put on ice enemata, and gradually began to improve. The improvement, once having begun, was very rapid. At the end of four weeks he was walking about. He was discharged on March 3d, about nine weeks ago, and is now as you see him, very much improved. The question is how much we can attribute to the operation. That is a difficult thing to say. The best way is to compare his present condition with that after the first and second admission to the hospital. Then he went downward so that he could not be kept out of the hospital more than six weeks. The improvement is in the patient more than in the urine. At the present time he has a little edema about the ankles, no ascites, no hydrothorax; pulse 21 to the quarter; low tension, regular. The urine is not improved in the same degree that the patient has improved, but has been increased in amount since the operation. He measures the total amount of urine from 7 A. to 7 P. M., and since May 1st up to to-day it has been 1,400 to 3,000 cc. per day. The albumin runs about .4 to .8 of 1 per cent.

Dr. Voorsanger—Dr. Shiels has struck the keynote when he says that we should protect an organ, even when we cannot cure. The line of work which Dr. Van Orden is carrying out with his assistants is very interesting. Dr. Kaufmann and Dr. Moor want to show that the kind of food is not as essential as formerly thought. We should observe the blood pressure very carefully, and try, if possible, early in the disease to diagnose a beginning heart lesion by the raised blood pressure. I remember some experiments carried on two years ago in Berlin where we tried to show that a heart lesion could be early diagnosed by a rise in blood pressure.

Dr. Fehleisen—I think the results of the surgeons have not been very favorable with Edebohl's operation. I have operated in only four cases. In two of these cases there was no result at all. One patient was improved, but it is not long enough to say what the final result will be. One patient was operated on twenty months ago. The patient was under treatment at least a year before. He was in bed eight weeks before. He had parenchymatous nephritis. There were epithelial casts, and from 3 to 6 per millimeter of albumin; immediately before the operation averaged about 5 per millimeter. He was operated upon; the result during the first week was not evident, but when the casts disappeared the albumin disappeared. During

the last two months no casts and no albumin, in some examinations; no casts but trace of albumin in others. I believe we should not give up the Edebohl operation entirely.

Dr. Himmelsbach. In these cases, in order to know whether diet is of any benefit or not, we should have a standard. We should know the standard amount of albumin excreted. If a patient looks well and acts well, we should keep him on the diet. I do not think that any patient treated by the Edebohl's operation was cured. In order to have a cure the albumin and casts must have disappeared, the amount of urea must be normal for about six months, and all the symptoms of chronic Bright's disease must have disappeared.

Dr. McNutt—There are few diseases on which climate has as great influence as on chronic nephritis. These patients should be sent to a warm climate, be careful about the clothing, regulate the diet, and the results are sometimes wonderful. I do not see anything wonderful in this patient of Dr. Harris. You see many cases of extreme anasarca, ascites, etc., which do perfectly well without any surgical measures. I have never had any experience with relieving the kidney of the pressure, but in a very much contracted kidney where there has been a great deal of proliferation with fibrous tissue, which we know will contract, I think it might be benefited by relieving the pressure of the contracting capsule.

Dr. George Shiels—These papers have been most interesting. We have heard Dr. Barbat's excellent paper, and know of the work of the two authorities whom he mentions, one advising decapsulation of the kidney, the other to await proof from the laboratory findings of Bright's disease. Here before us to-night we see this patient of Dr. Harris, who was at the point of death, now in a fairly good state of health. We know that Edebohl does not say that he can cure Bright's disease. He claims that he makes sick people well enough to go on with their work in life. For that reason we should not condemn the Edebohl operation if we have failures. It is our duty to do what we can to protect an organ if we cannot cure it. We should not condemn the operation, and we should stop discussing things which we do not seem to understand.

Dr. Perry—Very little has been said about the diagnosis and prognosis of this disease. I have worked with taking blood pressure in various diseases, and I find that it is of great importance both in the diagnosis and the prognosis. It is my experience when albumin in considerable amount is in the urine and the blood pressure is not above 160, the prognosis is good. When the blood pressure is not above 140 millimeters the prognosis is good. When there is a sudden drop of 20 or 30 millimeters it is a very bad prognosis. This high blood pressure is conservative.

Dr. Goodfellow—I have had experience in one case, and my conclusions have been published. I agree with Dr. Shiels concerning the Edebohl's operation. As far as I know he does not claim to cure Bright's disease. I do not know what Bright's disease is. We have no idea. It is a disease of the kidneys wherein the symptoms of albuminuria, anasarca and ascites are present. We are treating the expression of the general condition. The feature is not the disease. It is the condition pre-existing which produces that. What we expect to cure I do not know. If we can relieve the existing symptoms by operation we should do so.

Dr. Sprague—I can speak of this disease from experience. Four years ago a diagnosis was made in my case of chronic interstitial nephritis by authorities in New York. Following that I had several attacks of acute nephritis, hematuria, albumin, granular, hyalin, epithelial cells, blood cells and pus. Previous to this first examination of my urine I suffered from chronic indigestion, which I think was brought about by attacks of malaria. Chronic nephritis in its various forms is produced by faulty metabolism. I also believe that there are micro-organisms in the alimentary canal, which are a cause of this trouble. I think the one treatment for Bright's disease is a well-regulated diet, vegetable and animal. I believe the elimination should be attended to. I believe in Rochelle salts. Patients ought also to be out of doors day and night.

Dr. Fischel—I wish to say only a few words with regard to the part which the eye takes in this disease. It is very often the oculist who tells the patient for the first time what his trouble is.

Dr. Ophüls—As far as the physiological albuminuria is concerned, that is a much-disputed point. There is a certain type of chronic contracted kidney, apparently due to arterio-sclerosis. I did not go into these details, in order not to be too lengthy. As far as the nephrotoxin theory is concerned, I cannot follow Dr. Blumer. Pierce found poisons in dogs which had nephritis. I do not think they could be called nephrotoxins. It is all very theoretical; but first of all we must have the proof that nephrotoxins are formed at all.

Dr. Barbat—I did not say anything against the Edebohl's operation. If any procedure will relieve any disease, we ought to make use of it. I have decapsulated kidneys, and I shall decapsulate kidneys in every case where medical treatment is of no avail.

San Joaquin County.

The regular meeting of the San Joaquin County Society for April was held at the residence of Dr. A. W. Hoisholt, who read a most valuable paper on "Huntington Chorea," and demonstrated two cases.

BARTON J. POWELL, Secretary.

Sonoma County.

The Sonoma County Medical Society met in Eagles' Hall at 8 P. M., May 12th., Dr. J. W. Jesse in the chair, and a goodly number of physicians were present. Dr. M. M. Shearer, who had prepared a paper, could not be present, so the fee bill was taken up. After very interesting discussions as to charges in different diseases, an agreement was reached.

Dr. W. J. G. Dawson of the Home for Feeble-Minded at Glen Ellen, was present, and gave us a talk that made us glad that we were present. Dr. George Ivancovich of Petaluma, our delegate, gave us a short account of his views of the State Medical Society in convention at Paso Robles. It must have been worth attending.

Discussion on the new remedy, epinephrin, its dosage and uses, was quite interesting. Though we all use epinephrin, we like to hear from specialists—those more familiar with its use—how they use it, etc.

Our next meeting, on June 9th, will be a lively one. We shall try to adopt a fee bill, and we wish for a full attendance. G. W. MALLORY, Secretary.

Southern California Medical Society.

The regular semi-annual meeting of the Southern California Medical Society was held at Los Angeles, May 4 and 5. On the program were the following papers: "Pathology and Its Relation to Therapeutics," by E. S. Pillsbury, Los Angeles; "Interesting Case of Infection by Bacillus Coli Communis," by W. W. Roblee, Riverside; "Public Health," by S. P. Black, Pasadena; "Para-Syphilitic Affections," by Ralph Williams. Evening session, "Intestinal Suturing," by Rose T. Bullard; "Report of a Case of Intestinal Suture, by Connell's Method," by Lincoln Rogers; "The Surgical Treatment of Cancer," by A. S. Lobingier; "Treatment of Puerperal Fever," by Jos. M. King, Los Angeles; "Care of the Pregnant Woman," by Claire W. Murphy. Thursday session, "The American Girl and Her Peril," by F. R. Burnham, San Diego; "Report on Mastoid Cases," by H. Bert. Ellis; "Importance of Early Diagnosis and Treatment of Anterior Uveitis," by Samuel Outwater, Riverside; "Facial Paralysis," by R. G. Taylor, Los Angeles; "Cardiac Stimulants," by H. S. Gordon, Santa Ana; "The Role of Heredity in Disease," by Mary E. Dennis, Los Angeles; and "Lateral Curvature," by P. C. H. Pahl, Los Angeles. Thursday evening the society enjoyed a theater party, followed by a supper.

South Side Physicians.

At a meeting called for the purpose, at Dr. Alfred Eichler's office, May 20, 1904, permanent organization was effected of the Association of South Side Physicians of San Francisco.

Dr. Alfred Eichler was elected president, and Dr. William F. Barbat, vice-president.

The objects of the association are the promotion of mutual interests and acquaintance.

A. L. W. ZILLMER, Secretary.

AMERICAN PROCTOLOGIC SOCIETY.

The sixth annual meeting of this society will be held at Seaside House, Atlantic City, N. J., June 8

and 9, 1904. Papers will be read by the following: Drs. J. M. Mathews, J. R. Pennington, Jno. L. Jenks, L. H. Adler, S. G. Grant, S. T. Earle, G. B. Evans, Wm. L. Dickson, T. C. Martin, L. J. Krouse, Howard A. Kelly, F. W. McRae, J. P. Tuttle, A. Tierlink, Geo. J. Cook, and Leon Strauss.

Washington State Society Meeting.

The annual meeting of the Washington State Medical Society will be held in Seattle, July 12th, 13th and 14th. It is a beautiful time of the year to visit the northern coast country, and the meeting will undoubtedly be an unusually pleasant and profitable one. As many of our California physicians as can possibly get away should avail themselves of this opportunity to go north and meet their professional brethren of Washington.

Meeting of the Canadian Medical Association.

The annual meeting of this Association will be held at Vancouver, B. C., August 23 to 26, 1904. The Association has sent a very cordial invitation to the members of our Society to be present at this meeting, and it is earnestly desired that California shall have a good representation. Any of our members who may be able to attend will be assured of a most cordial welcome, and of a very interesting and instructive program. The Canadian Association is sending out a large amount of interesting literature, and making a very industrious campaign on the Coast, to the end that professional brethren from all quarters may be brought to attend.

The Tri-State Medical Society of Iowa, Illinois and Missouri will meet in St. Louis, June 15, 16 and 17. An interesting program is being prepared, and some of the most distinguished physicians and surgeons of the country will attend the meeting. The president is Dr. W. B. La Force, Ottumwa, Iowa; and Dr. Louis E. Schmida, 1003 Schiller Building, Chicago, is the secretary. Dr. James Moores Ball, 3509 Franklin Avenue, St. Louis, is chairman of the Committee of Arrangements.

PUBLIC HEALTH COMMISSION OF CALIFORNIA.

The regular meeting of the Federal, State and Municipal Board of Health, for April, held at the offices of the Public Health and Marine Hospital Service, San Francisco, April 30, was noteworthy. At this meeting it was decided to organize a permanent Commission for California, which would be somewhat broader in its scope than anything heretofore existing. Just exactly what work the new Public Health Commission will do remains to be seen; it is to be hoped that it will be energetic in whatever it undertakes. The following officers were elected: Rupert Blue, president; M. Regensburger, first vice-president; J. W. Ward, second vice-president, and Louis Levy, of the San Francisco Board of Health, secretary. It was decided that the Governor of the State, the Mayor of the city and members of the county boards of health be made ex-officio members.

Dr. A. H. Mays, one of the Councillors of the State Society, has gone to Europe for his vacation.

Through the liberality of Mrs. Robert J. Burdette, the maternity wing of the Pasadena Hospital has been completed and dedicated.

Change of address, San Francisco: Dr. A. B. Grosse, from 803 to 751 Market street; Dr. D. A. Hodghead, from 1025 Sutter street to Grant Building.

A CASE OF GALL-STONES.*

By E. HARBERT, M. D., Stockton.

THE case that I have to report to-night is one that I saw two years ago in consultation with another physician. At that time the patient was suffering from a malignant condition of the uterus. The patient was 38 years old, a mother of five children, of healthy parents, with no hereditary taints whatever to be noted in her family's history. Her health prior to that date had been bad for several months and she had received local treatment, which resulted in but little improvement. An operation was advised and agreed to. The patient was removed to the hospital and prepared in the usual way and a hysterectomy followed, together with removal of tubes and ovaries.

The patient was on the table about fifty minutes and was removed in good condition, suffering very little from shock and nausea. Her convalescence and recovery were uneventful, and at the end of five weeks she had gained considerable weight and was entirely free from pain or other symptoms. About twelve months after the operation she began to complain of severe pain arising from an eruption that made its appearance on various portions of the body. The first came over the left trochanter, forming a brown blotch about the size of a dollar and regular in shape. The blotch had the appearance of being an extravasation of blood beneath the cuticle. It was intensely sensitive to touch and made the patient so lame that she could not bear her weight on that leg. This place remained in evidence for two weeks, gradually fading, giving way to others of like character, making their appearance on some other part of the body, usually on the lower extremities, although there were several on the trunk.

I could not account for the origin and nature of these spots, as I had never seen anything like it before. There was no rise of temperature nor acceleration of pulse. A number of remedies were employed, both local and constitutional, with no appreciable benefit. She passed along for about six weeks in this condition, getting no better, but instead began to complain of tenderness over the entire abdominal cavity, the most tender point being near the pit of the stomach; she had some diarrhea, passing considerable mucus and occasionally blood-stained. These symptoms were somewhat accelerated from day to day, accompanied by a hacking cough that seemed never ceasing. This cough grew gradually worse until the patient was entirely exhausted from its intensity and for the want of sleep. The only respite she could get was when she was under the influence of $\frac{1}{2}$ grain of morphin. I want to mention here that this cough did not present any of the characteristic features of pulmonary disease. There was never at any time any expectoration or other symptoms pointing to disease of the lungs. She was seen and examined by a consulting physician, who found enlarged turbinates, which were supposed to give rise to the cough. She was accordingly operated on, the turbinate removed, and the cough immediately relieved. The patient had no return of same and after about six weeks of treatment for colitis and enteroptosis, she returned to Stockton with no cough and slightly improved generally. She had been home but a few days, when the old cough began to make its appearance, gradually increasing in intensity until she was in worse condition than ever before. It was decided, owing to the extreme tenderness in the region of the stomach and along the free border of the costal cartilage on the right side, to make an exploratory incision over the gall bladder for the purpose of examining the contents of the

same, as well as the region thereabouts. After the usual preparation for such operations, the patient was anesthetized and an incision made along the external border of the rectus muscle extending down about four inches; the abdomen being open, the first two fingers of my right hand were introduced. Besides some adhesions around the gall bladder, there was nothing discovered until the cystic duct was approached, and therein was discovered a calculus firmly imbedded. After segregating bladder and protecting the peritoneal cavity and its viscera, the bile was drawn off and the fundus incised, making an opening large enough to introduce an ordinary sized spoon curette; two fingers of the hand were passed down beneath the stone and with a gentle and careful milking of the duct, the stone was slowly but surely forced back into the bladder, after which it was easily removed. The incised viscus was closed with continuous silk suture, the wound cleaned, the abdomen closed and the patient put to bed, having been on the table about forty minutes. The patient made an uneventful recovery and has never had a symptom since she went on the operating table, this being about six months from that time. The special points in this case making it different from others, are the peculiarity of eruption, the absence of the usual symptoms of gall-stones (with the exception of pain) and the persistent cough that was indeed hard to account for, and the relief following operation on the nose. In the majority of cases of biliary calculi, the diagnosis is easily made, but in some instances there are but few things that require more skill on the part of the physician to arrive at a correct understanding. Usually we have pain of somewhat peculiar character beginning over the gall bladder and radiating to the shoulder, which may be of a mild form, but is most usually very severe. Icterus may be present or absent. When there is any infection we have fever, the rise of temperature being in keeping with the amount of systemic infection. Vomiting is almost always present in acute attacks. Of the many diseases that it may simulate, a few I might mention are: Gastritis, gastric colic, intestinal colic, pleurisy, appendicitis, hepatitis, typhoid fever, malaria and cancer. In endeavoring to make a differential diagnosis, I find it convenient to follow the plan laid down in some recent text books, to note carefully the clinical history and ascertain whether the pain is hepatic, renal or intestinal, and where the symptoms lead us to suspect the involvement of the hepatic region, the effort to elicit crepitus should be made and the feces thoroughly examined for the presence of concretions, which, when found, complete the diagnosis. The use of the X-ray is an important adjunct in making the diagnosis. It is well to remember that hepatic calculi may be present at all ages; even the unborn infant has been known to have them. It regard to the treatment of biliary calculi it is interesting to note that in the past ten years the treatment which was largely medical, has changed to that of being largely surgical, undergoing a slower, but just as sure evolution as did appendicitis.

There are but few of us so young in the work but remember that the universal treatment of this condition was the administration of drugs supposed to have some solvent action on the bile and calculi. Today there are but few physicians who give sweet-oil, thinking it will dissolve gall-stones. Under the present surgical mode of treatment, we have a much too high mortality, which reaches to about 30%, in all cases going to hospitals. This high death rate can be accounted for when we remember that those patients operated on, the majority of them

(Concluded on page 204.)

* Read before the San Joaquin Medical Society.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Calcium beta-naphthol sulphonate	{ Abrastol Asaprol
Creosote Tannate	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)
† Epinephrin	{ Adnephrin Adrenalin Adrenamine Adrenol Adrin Hemostatin Suprarenalin
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine ..	{ Aminoform Ammonio-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
" , anhydromethylen citrate ..	{ Helmitol
Levulose	{ Diabetin Fructose Fruit Sugar
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin	{ *Benzanalgene *Analgen *Quinalgen

Paraphenetin carbamid	{ Dulcin Sucrol
Phenyl-dimethyl-parazon . (Germ. Pharm.)	{ Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin
Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	{ Acetophenone Hypnone
Plant pepsin	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-caffeate	{ Nasrol SymphoraI
Thyroid gland, dried lactose trituration	{ Iodothyrene Thyroidin
Trioxymethylen	{ Paraformaldehyde Paraform Triformol
Abrin = Jequiritin	
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Alsol	
Australian oil Eucalyptus = Flucol	
Bismuth chrysophanat = Dermol	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphol	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1% solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Dimethyl-xanthine = Theobromine	
Guaiaacol carbonate = Duotal	
Laricinic Acid = Agaricin	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garanotose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloracetic acid, 50% solution	Acetocaustic

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, page 178.

A CASE OF GALL-STONES.

(Continued from page 202.)

in the advanced state of infection, long after the second, third and perhaps twentieth attack of colic has occurred with an impaction, present infection and a general bad systemic condition to deal with. Cholesystotomy, I consider is one of the comparatively safe operations, and is void of great danger to the patient if properly and early done. Gall-stones, to my mind, is just as much of a surgical disease as is appendicitis, and should be dealt with just as promptly, thereby insuring just as satisfactory results. In emphasizing the importance of early operative interference, I would like to quote some of our more experienced men on the subject. The indications for operation in cholelithiasis are thus given by Mayo Robson: 1st. In frequent recurring biliary colic, without jaundice, with or without enlargement of the bladder. 2d. In enlargement of the gall-bladder, without jaundice, even when unaccompanied by great pain. 3d. In persistent jaundice, ushered in by pain and where recurring pains with or without ague like paroxysms, render it probable that the cause is gall-stones in the common bile duct. 4th. In empyema of the gall-bladder. 5th. In peritonitis starting in the right hypochondriac region. 6th. Abscess in and around the gall-bladder. In some cases where gall-stones have passed and adhesion remained and proved a source of pain. In fistula, mucus, mucopurulent or biliary. . . . In certain cases with distended gall-bladder dependent on obstruction in some of the bile ducts. . . . In phlegmonous cholecystitis and in gangrene if it can be seen and recognized early.

Henry Morris gives us about the same reasons for operating. Charles A. Reid and Riedel of Berlin are of the same opinion. Halsted is still more conservative in his treatment. He states that the mortality bears a definite relationship to the pathological condition present. He reports 299 laparotomies with 17 deaths, being 8 per cent, but the mortality was reduced to a minimum in the cases of stone in the bladder and cystic ducts, while it reached 6 per cent when there were changes in the gall bladder.

Dangers of Proprietary Preparations. It is not by any means putting the matter too strongly to say that the "patent medicine" habit is one of the gravest curses, with the most dangerous results, that is inflicting our American national life. Sooner or later the people of America must awaken to the fearful dangers that lie in these proprietary preparations. The mothers of our children, in particular, must have their eyes opened to the dangers that lurk in these patent medicines. —*Ladies' Home Journal*.

Giving Alcohol to Children. A mother who would hold up her hands in holy horror at the thought of her child drinking a glass of beer, which contains from two to five per cent of alcohol, gives to that child with her own hands a patent medicine that contains from seventeen to forty-four per cent of alcohol—to say nothing of opium and cocaine! I have seen a temperance woman, who raged at the thought of whisky, take bottle after bottle of some "bitters," which contained five times as much alcohol—and compared to which sherry, port, claret and champagne were as harmless as the pink lemonade at Sunday school picnics. —Bok, in *Ladies' Home Journal*.

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California State Journal of Medicine.

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Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

JULY, 1904.

EDITORIAL NOTES.

The fifty-fourth annual meeting of the American Medical Association was the most successful in its history, so far as attendance **THE A. M. A. MEETING.** was concerned. Something over 2,800 members registered at Atlantic City. As a meeting place, it would be hard to find a more satisfactory city, for the hotel accommodations are almost unlimited. A little matter of two or three thousand people does not bother 800 hotels! There was less work in the House of Delegates than was the case last year, though there was still too much time wasted. The Association is committing a serious error in doing too much tinkering with its constitution and by-laws, and in allowing a "close corporation" of individual members, representing but four or five States, to run the whole machine. Organization is progressing rapidly and satisfactorily, it is true, and it is to be hoped that it may so continue. There is, however, a very decided undercurrent of feeling of resentment, and this should not be overlooked by the gentlemen of the coterie. If the organization is to be effectively *held together when once secured*, there must be evident less "close corporation" politics and more broadness in dealing with those questions which affect the general tone of the whole profession. The Association must, sooner or later, recognize that a control which makes its *Journal* the "greatest advertising medium for proprietary preparations" in the United States is not the control that will hold together State Associations which do not approve of this policy; there are such, and their number is rapidly increasing.

The American Medical Association selected Portland as the place for the next meeting. The committee on place of meeting recommended Los Angeles. Hot Springs, Ark., and San Francisco had also filed invitations for the 1905 meeting. San Francisco was rejected because the American Medical Association had already convened in that Pacific Coast city, and the committee thought that the Association, if meeting on the Coast, should go to some other city. The very able delegate from Oregon, Dr. K. A. J. Mackenzie of Portland, assured the House of Delegates that there would be ample accommodation for all by the time of the meeting. We sincerely trust that nothing may interfere with the completion of the hotels now building, and that the Portland meeting may be in the highest degree a successful one. Portland is easily accessible from almost every part of California, and our State should have a very large representation at the next meeting. We cordially extend to Portland our very best of good wishes, and offer any assistance in our power, should such be needed.

A criticism that has been made in previous years can be repeated this year, if one considers the hodge-podge of stuff in the "Hall of Exhibits" at the A. M. A. meeting. It is a disgrace to the Association that it should permit the foisting of nostrums upon physicians at these meetings. There need be no misunderstanding of this matter. A nostrum is a secret remedy, one the actual component parts of which are not known, and booth after booth in the "Hall of (disgraceful) Exhibits" displayed such wares. If exhibiting this stuff at the meetings and advertising it in the Association's *Journal* is not "promoting the use of secret remedies," will some kind friend be good enough to say just what it is? The responsibility rests with the Trustees; it is plainly up to them to insist upon decency, or else openly confess that the Association is out for money, clean or dirty, so long as it is money; that money, and not a high professional standing, is what they are after.

At Atlantic City, during the meeting of the A. M. A., an association of State Medical Society Journals was formed. The objects of this association are very simple. **STATE JOURNALS.** The first one is to come to a common understanding as to what shall be considered ethical in the matter of advertisements. Another is the hope that, by concerted action along lines of policy agreed to by all, very much greater influence may be brought to bear

than would be the case with separate individual action. Decency in medical journalism is rather a new thing—particularly when applied to the advertising pages—and the establishment of state journals, properly conducted in this particular, may go far toward making it less uncommon. The Trustees of the A. M. A. feel that they must “lay up treasures upon earth,” so they have to advertise all sorts of nostrums. Some of the State Societies, however, seem to have the feeling that it is more becoming to live up to certain principles of right living, called “principles of ethics,” and not to lend their publications to the cheerful work of debauching the medical profession. Our JOURNAL is certainly for the Association of State Journals, and for the right principle, and we wish the new association every possible success.

No one in this generation pays any particular attention to anonymous letters. Any man who has a statement to make or a complaint to file, and who is afraid to sign his name to it, lays himself open to the inference that his statement or his complaint is not founded on a basis of fact. Neither the Society nor the JOURNAL can afford to pay attention to unsigned letters. This does not mean that the identity of the writer will, in every case, be published; but it means that to secure recognition the responsible author must be known. All this is apropos of an unsigned communication addressed to the Secretary anent professional misconduct of the “school doctor,” an office recently established by the San Francisco Board of Health. If the writer of the letter in question will forward his name and address, the matter of his complaint will be taken up and thoroughly aired; otherwise, with regret, we shall have to pass it by in silence. Incidentally, and in passing, it may be said that the numerous gentlemen who address the Board of Examiners in regard to illegal practitioners, without the formality of attaching their signatures, are, to say the least, inconsiderate. Don't be a coward. If you know of something going wrong, come out like a man and say so; put it on paper, and sign your name to it. Your confidence will be respected, and so will you; vastly more respected than if you hide behind the anonymous letter.

An exceedingly important decision has recently been handed down by the Supreme Court of North Carolina. The case at issue was one involving the constitutionality of the dental practice act, and was, in every essential particular, identical with the case, *ex parte* Gerino, just decided by the Supreme Court of this State. A

summary of the decision is published in the *Journal of A. M. A.*, April 9th. The points decided are the power of the Legislature to require an examination; the exercise of police power by the State for the protection of the public, as against the conferring of special privileges; the right to require an applicant to comply with every requirement of the law before taking an examination; and the right of the Legislature to delegate its appointive power to a recognized society or association of professional men who are assumed to be better able to intelligently select the examiners who shall carry out the requirements of the Legislature. Slowly, but surely, the courts of last resort are deciding on the fundamental questions at issue, and the time is evidently not far distant when the status of all proper laws for the control of medical and dental practice will be clearly defined and supported by decisions.

Work is progressing on the preparation of the 1904 edition of the Register of Physicians.

Blank “record” cards will have been sent to all physicians in the state before the middle of this month, and it is desired to have the card file completed at as early date as possible. This can only be accomplished through the co-operation of the physicians themselves. A moment's time is all that is required to fill up the card and mail it, and then there need be no reason why names and addresses should not appear correctly in the Register. The publication office force is taking every precaution against errors, and if the recipients of the record cards will do their part in the work of compilation, by sending in data promptly, the Register of 1904 will be as complete as it is possible to make it. It should be understood that the record cards are to serve a double purpose—furnish data for the Register, and be kept for reference in the office of the State Society. While only a portion of the information asked for is to be published in the Register, it is all essential in the making of a complete record file. Once more it is urged upon every physician in the state to send in his record card promptly.

It is always sad to see the taking off of a strong valuable life in its early vigor. If the untimely end is due, either wholly or in part, to the use of tobacco and alcohol we naturally feel still more sorry to see such an unworthy snipping out of a useful and potentially great life. We note that Mr. Noah Raby, of Eatontown, N. C., recently died, and under circumstances that make his death particularly sad. Mr. Raby, according to his own statements, which seem to have been pretty well confirmed, was but 136 years old; and there can be

little doubt that his death was primarily due to his consumption of liquor during 120 years of that time. He was a constant user of alcoholic beverages and tobacco, and had it not been for the deadly effect of these poisons upon his strong and vigorous system, Mr. Raby might have lived to a good old age. Too bad!

THE MEDICAL ACT SUSTAINED BY THE SUPREME COURT.*

On the first of June the Supreme Court handed down its decision in *ex parte Gerino*, sustaining the State medical practice act. The case was heard by the entire court, and not one of the seven Judges dissented. Just prior to the submission of the case, Judge Murasky of the Superior Court of San Francisco had held the act constitutional in the von Tiedemann, Gardini, Herbein cases. The lucid, logical decision, written by Justice Shaw, and which will always rank as a leading case, does great honor to the Supreme Court; for, although none of the constitutional questions raised by the contestants were necessarily involved in the proceeding, nevertheless the court, from public-spirited motives, passed upon all of them, and thereby obviated the necessity for considerable special litigation.

The decision must afford no little satisfaction to the sagacious and able originators and framers of the act. The profession will find cause for rejoicing in the fact that it may continue to exercise the public function delegated to it by the Legislature, as it has done for a quarter of a century, for the right to elect the Board of Examiners is not taken from the state medical societies and bestowed upon the Governor. The regular will not fail to appreciate the compliments to his school of medicine, which he will find throughout the opinion. The friends of higher medical education and the advocates of interstate medical reciprocity will congratulate themselves upon the action of the court in sustaining the truly scientific and national standard of the Association of American Medical Colleges, which our Legislature was the first to adopt. We hope other states will see fit to adopt the standard, for it is a long step toward that uniformity of legislation which is the true basis of reciprocity.

The decision is a complete indorsement for the majority of the Board of Examiners, who insisted upon the enforcement of the plain letter of the law. It is the answer to those timid minds and prophets of misfortune who never ceased to predict that the prosecution of unlicensed doctors of medicine would bring about the downfall of the law. It is now clear that the strenuous president of the board was not a "persecutor," but the exponent of law and order.

The attorneys for the Board of Examiners, in their brief, accused Gerino of attempting to bring

about a medical anarchy, because he was striving to wipe out the entire statute. His counsel replied: "The object and purpose of this litigation is to secure a judgment declaring a law unconstitutional which in its practical operation has become an engine of the grossest injustice. Our object and purpose is to secure a judgment nullifying an iniquitous law in order that other legislation may take its place, based upon the fundamental principles of equal rights and justice to all. Our object and purpose is to secure a judgment declaring this law unconstitutional, in order that a new law may be enacted which will entitle more than one hundred young men to practice medicine in this state, who have been educated in its medical colleges, and who are fully qualified in all respects to follow their chosen profession, and who are denied that right by the unjust provisions of the present act."

Counsel were pleading the natural and divine rights of "Sundown" von Tiedemann diplomas, and vouching for the qualifications of the medical Coxeyites and illegal practitioners who were turned down by the Legislature at its last session. It now appears that the iniquitous law which denied them the right to practice, which classed them at least as incompetents, was just, wise and beneficent.

At the very outset of the litigation over the medical act we predicted the triumph of the law, because it was based upon the solid rock of judicial precedent. Knowing of the precedents of the Frazer and other leading cases cited by the Supreme Court in the Gerino case, we were surprised that the title to office of the Board of Examiners should have been questioned by the Attorney-General, and that he should have permitted the name of the people to be used in a suit to remove the board from office, and to destroy the power of appointment delegated to the state medical societies by the Legislature.

The decision in the Gerino case affords cold comfort to the illegal practitioner. Unless we are greatly mistaken, it is the death knell of diploma mills and quackery in this state. Gerino, the champion of medical anarchy, until the next session of the Legislature "is remanded to the custody of the Chief of Police." Unfortunately the order of court does not reach as far as the Territory of Oklahoma, whither Gerino is said to have fled.

SAN FRANCISCO BOARD OF HEALTH AND THE MILK SUPPLY.

The San Francisco Board of Health, after an investigation of the source of the milk supply of this city, has found the dairies in an extremely unsanitary condition, a condition which urgently calls for reformation.

*See page 209 for text of decision.

This is not the first time the subject has been referred to in these columns, and it is one, the importance of which calls for serious consideration on the part of the medical profession. The situation is not new, and it reflects no credit on the sanitary inspectors of the local board that it has not been exposed long ago. The attention of the profession was called to the condition a year ago in the columns of the JOURNAL, and the dangers were pointed out. About the same time the typhoid fever epidemic at Palo Alto demonstrated the possibilities of carelessness among dairymen.

It is to be hoped that the local board will do something more than agitate, though we confess that we do not hope for great things in this respect from boards of health. The medical profession must take up this question through the local societies, as has been done in Eastern cities, by the appointment of medical milk commissions. The question is largely one of education of the dairymen as to what really constitutes clean milk and sanitary dairies; and this can only be done by inviting the co-operation of the dairymen and convincing them that we are desirous of assisting them in placing on the market an article the purity of which we can certify to. It can safely be said that there is not a properly conducted sanitary dairy supplying milk to San Francisco. Of course some are worse than others; but in an inspection of a number of them by a member of the Publication Committee a year and a half ago, the condition was found to be disgraceful. None of the dairy buildings were properly drained; the drainage from houses, barns, privies, etc., in some instances flowed by unprotected wells and through pastures; drainage ditches were accessible to cows which oftentimes wallowed in

this filth; no grooming of cows or cleaning of udders was observed; no attention to cleanliness among milkers was attempted, nor was there any medical inspection of the families of the workmen. All this and a great deal more is necessary to produce wholesome, clean milk, free from pathogenic bacteria. It is surprising that the specimens of milk procured from these dairies at that time averaged only 223,000 bacteria to the cubic centimeter.

Of course it cannot be expected that all the dairies will come up to these requirements, and it is here that the limitations of health ordinances are manifest. Already the dairymen are objecting to the proposed regulations, claiming that they cannot produce milk at present prices under such regulations. This is true. Sanitary dairies cannot be maintained at a profit, if the product is to be sold at ten cents per quart, and the public will have to be educated to the fact that good milk costs more money than they have been paying for bad. A medical milk commission would probably not be able to induce more than one dairyman at first to subscribe to its requirements; but this dairyman would be armed with such a recommendation for his product that the demand would easily justify the increase in price; an argument which would be readily seen by other dealers. This has been the experience in other cities. When the Philadelphia Milk Commission organized four years ago it succeeded in obtaining two dairies to meet its requirements; but at the last report of that commission six dairies were receiving certificates from it.

Let the committee on public health of the County Society see to it that we have at least one clean dairy.

COMMUNICATION.

WILL ENFORCE THE LAW.

To the Editor of the STATE JOURNAL: The recent action of the Alameda County Society, respecting the enforcement of the medical practice act, may interest the members of other societies, and it is hoped stimulate to similar effort.

At its meeting of a month ago the Alameda County Society enthusiastically voted to enter vigorously as a society upon the work of enforcing the law in its own territory, and to this end appointed a legal committee consisting of the president, the secretary and three other members, whose duty it shall be to actively ferret out and prosecute, repeatedly if necessary because of acquittals, all persons violating the law. The committee proposes to uphold the Board of Examiners in every way, and to work in harmony with the board. A conference has already been held with the president of the board, at which a plan of campaign was outlined. The committee has enlisted the sympathy and is promised the aid of the District Attorney and the police authorities, and has in hand sufficient funds to meet all present demands, with

the assurance of more to follow as needed, voluntarily subscribed for the purpose by the society members.

The committee will employ its own attorney, and the work will be begun at once; and it cannot be doubted that the movement, backed as it is by the united sentiment of a society numbering about 130 in membership, and the support of the civil authorities, will be productive of much good in the community.

Any information relative to illegal practitioners in Alameda county will be welcomed by the committee, Drs. Maher, Pratt, Milton, Miller and T. C. McCleave, chairman.

T. C. MCCLEAVE.

The Alameda County Society is to be congratulated upon its action. The Board of Examiners has heretofore received but little assistance from county societies in the prosecution of illegal practitioners, but now that the matter is clearly brought to issue, that this important work should be undertaken by the different county societies, it is to be hoped that all will follow the good example of Alameda county, and will appoint similar committees.—Ed.

SUPREME COURT SUSTAINS THE STATE MEDICAL LAW.

The STATE JOURNAL prints in full the decision of the Supreme Court, sustaining in every particular the constitutionality of the medical practice act. The decision should be carefully read by every physician in the State, for it is a clear, exhaustive and scholarly document, completely setting at rest all contention as to the constitutionality of the act.

Crim. No. 1107. In Bank. June 1, 1904.

Ex parte Gerino on Habeas Corpus.

Application for writ of habeas corpus directed against the Chief of Police of the City and County of San Francisco.

For Petitioner—Garoutte & Goodwin; Otto tum Suden, R. B. Carpenter and Beverly L. Hodghead, amicus curiae. For Respondent—William M. Maguire and William C. Tait; Charles S. Wheeler, of Counsel.

The petitioner is in custody on the charge of practicing medicine without a certificate from the State Board of Medical Examiners, established by the act of February 20, 1901, for the regulation of the practice of medicine and surgery. (Stats. 1901, 56.) By his petition in habeas corpus he asks to be released on the ground that the statute is unconstitutional. The act establishes a State Board of Medical Examiners which is empowered to issue to persons who pass or have passed a satisfactory examination a certificate which shall authorize such persons to practice medicine and surgery in this State. It makes it a misdemeanor for any person not having such certificate to engage in the practice of medicine or surgery. It is conceded that the Legislature has the power to enact laws establishing the conditions upon which persons shall be allowed to practice the profession of medicine within this State. The inquiry before us is whether or not this power has been constitutionally exercised. Several provisions of the act are assailed, and each is claimed to be so essential to the general purpose and object of the law that, if it is unconstitutional, the whole law, including the part defining the offense in question, must be declared invalid.

1. The act provides, with respect to the membership of the Board of Examiners, that "five members thereof shall be elected by the Medical Society of the State of California, and two members thereof by the California State Homeopathic Medical Society, and two members thereof by the Eclectic Medical Society of the State of California." This, it is claimed, violates section 21, article I, of the State Constitution declaring that no class of citizens shall "be granted privileges or immunities which upon the same terms shall not be granted to all citizens"; also section 11, article I, that "all laws of a general nature shall have a uniform operation"; and subdivision 19, section 25, article IV, forbidding a special or local law "granting to any corporation, association or individual any special or exclusive right, privilege or immunity."

The Legislature has power to establish offices in addition to those created by the Constitution itself. Section 4, article XX, provides that ". . . all officers . . . whose offices or duties may hereafter be created by law, shall be elected by the people, or appointed, as the Legislature may direct." This gives the Legislature power to declare the manner by which officers, other than those provided by the Constitution, shall be chosen. Such officers may be appointed by the Legislature itself, or the duty of appointment may be delegated and imposed upon

some other person or body. (People v. Provines, 31 Cal., 541; In re Bulger, 45 Cal., 559.) There is no limitation to any particular person or class of persons upon whom alone the Legislature may impose this obligation.

In our opinion the power to appoint officers in such cases is not one of the rights or privileges contemplated by the provisions of the Constitution upon which the petitioner relies. It is more in the nature of a duty than of a right or privilege. The rights and privileges referred to in those guarantees and limitations must be something for the individual benefit or advantage of the person or association upon which they are conferred, and not the power to perform a public duty for the benefit of other persons or of the public. In exercising the power in this particular case the societies mentioned in the law are acting for the benefit of the State and the people at large. The power of the State to constitute such a board, and to impose restrictions upon the right to practice medicine to be enforced by the board could not be upheld at all if it were put upon the ground that in so doing the State is acting for the benefit of any one or all of the medical societies or schools of medicine existing in the State. The power rests entirely on the theory that such regulations are for the general welfare, and to protect people from the arts of quacks and pretenders and from the mistakes of incapable practitioners. The Board of Examiners, when constituted, is not the agent of the medical societies which appoint its members, and its functions are not conferred or designed for the benefit of those societies, or either of them. The board constitutes a State agency for the regulation of the practice of medicine and surgery, and it must discharge that duty under oath, and impartially for the benefit of the people, and not for the promotion of the interests of any school of medicine or medical society. In *ex parte Frazer*, 54 Cal. 94, substantially the same question was raised in the argument, although it is not discussed at large in the opinion, and the court, speaking of a like power of appointment, says: "The assumption of the power by these individuals or societies would be the assumption of a public duty, and the performance of the duty simply would not be profitable or beneficial to them, as societies." (*Fernor v. State*, 151 Ind. 249; *Wilkins v. State*, 113 Ind. 514.) The societies named by receiving this power of appointment are constituted agencies of the State to perform a part of the duty pertaining to the sovereign power of the State, and they are not, in that respect, the recipients of private rights or privileges. (People v. Provines, *supra*.)

The decisions in *Britton v. Board*, 129 Cal. 341, and *Murphy v. Curry*, 137 Cal. 485, are not applicable. They hold that when the Legislature undertakes to prescribe rules and conditions under and by which alone citizens, either individually or collectively, may freely exercise political rights, such as the right of suffrage, or the right to become a candidate for office at a general election, it must make rules and establish conditions which shall give to every citizen, as against any other citizen, equal facilities for the exercise of such rights, and that, if any privileges are given to any party or association of citizens to have the names of its particular candidates spread upon the official ballot, the same privileges must be given to all parties and associations similarly situated and having like objects and purposes. The law here in question does not deal with political rights held by citizens generally, nor with any existing right of these medical societies. The societies were presumably not organized for the purpose of appointing members of examining boards, and neither of them possesses any such right or power independent of

the law conferring it, nor is this power given them in furtherance of the exercise of any right or power which they possessed before. It is, as before stated, a simple public duty which they are empowered to discharge as a political agency of the State. The Legislature may distribute such powers according to its will under section 4, article XX, untrammelled by the restrictions in other portions of the Constitution respecting the granting of rights and privileges equally to all of the same class. It may be true that in making these appointments each medical society will choose persons who believe in the school of medicine of which its members are composed. This, however, does not render the law unconstitutional. The board, when appointed, must act equally for the benefit of all applicants, and impartially with respect to each regardless of the school of medicine to which they belong. Their official oath so requires, and there is nothing in the act which authorizes or permits them to do otherwise.

We have thus considered and decided the validity of the method of appointing the members of the examining board for the reason that both parties have fully discussed the subject, and certain persons, claiming to represent the State in a quo warranto proceeding to test the right of the board to hold that office by virtue of such appointment, have appeared amici curiae and argued the proposition from their standpoint. We think, however, that this objection does not involve the constitutionality of the act as a whole. The law establishes an examining board and prescribes its duties and powers, and the power of the Legislature to establish such board is not disputed. This being the case, it is clear that, even if the method provided in the law for the appointment of the members is invalid, the other provisions of the law would stand unaffected. (See cases hereinafter cited.) There would then be a legal office established without any specific provision for the appointment of any person to fill it, and the vacancy thus existing could be filled by appointment of the Governor. (Const., art. V, sec. 8; *Quigg v. Evans*, 121 Cal. 551; *People v. Edwards*, 93 Cal. 156.) But, as it would be a legal office, it could be filled by a de facto officer, and in that case the validity of his appointment and his right to hold the office could not be questioned in this proceeding in habeas corpus.

2. The other objections relate to the construction and effect of section 5 of the act. It begins by requiring that every person practicing medicine or surgery in the State must have the certificate of the examining board as therein provided. It then enacts that, as one of the steps toward procuring a certificate, the applicant must produce "a diploma issued by some legally chartered medical school the requirements of which medical school shall have been, at the time of granting such diploma, in no particular less than those prescribed by the Association of American Medical Colleges for that year." The provision fixing the standard of this association as a test of the character of the medical school issuing the diploma is, it is contended, invalid, first, because it is said that the association is composed of colleges teaching only the regular or allopathic system of medicine, and, therefore, it would place it in the power of that school of medicine to fix a standard that would put the other schools at a disadvantage, and this makes the provision an unjust and arbitrary discrimination against all of the other schools of medicine, and, secondly, because it delegates to the association the power to fix this standard, a power which, it is claimed, can be exercised only by the Legislature itself, and, moreover, it is in effect the adoption of a standard that may vary from year to

year, whereas the provisions of law, it is said, must be fixed, definite and certain.

A diploma is required because its possession indicates that the applicant has, to some extent, prosecuted the studies necessary to qualify him to follow the medical profession. It may be that there are medical colleges which require little preparation on the part of their students as a condition to the issuing of a diploma. The provisions of the law imply that there are such. If the diplomas of such colleges were made sufficient to admit an applicant for a certificate to an examination, the number of that class of colleges would doubtless increase. It was therefore necessary, in the judgment of the Legislature, to prescribe a standard of scholarship to be maintained by the colleges whose diplomas the board should be authorized to accept. The law on this point is not to be construed so as to require these colleges to have the identical course of study and those other requirements prescribed by the association. The test is that the requirements of such college shall be "in no particular less than" those prescribed. That is to say, the standard of scholarship required of its students shall be equal to the standard required by the association. It need not be the same course of study, nor the study of the same textbooks, nor the attendance for the same length of time, but it must be such as require of the student a degree of proficiency in the studies necessary to prepare him for practice equal to that which would ordinarily be produced by the requirements prescribed by the association. Whether or not the association of American Medical Colleges is composed of those only which teach the allopathic branch of that profession we cannot say; but admitting it to be so, we cannot say that there is in this provision of the law, thus understood, an arbitrary or unjust discrimination against other schools. Surely they would not claim the right to have the adherents of other schools admitted to practice the profession upon a less degree of proficiency in the preparatory studies than is required of those in the regular school.

It being proper for the Legislature to demand some standard of efficiency, as we have seen, we think it is equally within its powers to declare that it shall be the same as that prescribed from time to time by an association composed of colleges devoted to the work of preparing persons for the profession. Evidently the standard of proficiency in scholarship as a preparation, and the particular studies necessary to secure a fair preparation must change as the discoveries in natural science open new fields of investigation and suggest or reveal new curative agencies. The Legislature cannot successfully prescribe in advance a standard to meet these new and changing conditions. The method adopted appears to be sufficiently definite to enable all colleges to reach the required standard, when in good faith they desire to do so. The law is as fixed, definite and certain in this respect as the nature of the subject and the object to be attained will permit; and we do not think it should be held void because it adopts the standard fixed from time to time by those who, it will be presumed, are the most eminent in the profession which it attempts to regulate, and who should be the most interested in maintaining the highest degree of professional proficiency, skill and training.

3. The next objection is that under the guise of authority to exercise discretion the examining board is given power to make arbitrary and unjust discriminations between persons holding certificates from medical examining boards of other States by subjecting one to an examination and admitting another without examination. This objection is di-

rected to the last paragraph of section 5 of the act, which provides, in substance, that in the case of a person holding a certificate from another State Examining Board, which has required the production of a diploma or license of equal grade to those required by the act, and has also required the holder to pass an examination as strict as that required by our own board at the time, such person may, in the discretion of the board, be admitted to practice without further examination. It will be seen that every person within this class must have a diploma or license such as the act prescribes, and therefore must be eligible to examination here, if the board requires it. If the provision giving the board discretion to admit without examination is held unconstitutional, the effect would be that all applicants must submit to examination as provided in the act. The act shows clearly that the main purpose is to admit no one to practice who has not passed such an examination, and the only effect of the last paragraph is to permit in some cases the substitution of the examination of another State board for that of our own. A law which is unconstitutional in part only is not to be held wholly void, unless the invalid portion is so important to the general plan and operation of the law in its entirety as to reasonably lead to the conclusion that the law would not have been adopted if the Legislature had perceived the invalidity of the part so held to be unconstitutional. If the law is separable, so that the general object can be attained without aid from the part that is void, the other parts of the law will be upheld. (Ex parte Frazer, supra; People v. Parry, 79 Cal. 105; People v. McFadden, 91 Cal. 496.) "If an independent provision, not in its nature and connections essential to the law, be unconstitutional, it may be treated as a nullity, leaving the rest of the enactment to stand as valid." (McGowan v. McDonald, 111 Cal. 65.) Such invalid provisions "will not vitiate the whole act, unless they enter so entirely into the scope and design of the law that it would be impossible to maintain it without such obnoxious provisions." (People v. Hill, 7 Cal. 103; People v. Burbank, 12 Cal. 393; Mills v. Sargent, 36 Cal. 382.) It is not necessary to consider whether or not the provision allowing a discretionary power to admit without a new examination in some cases is constitutional. Conceding, but not deciding, that such provision is void, it comes clearly within the rule above stated, and does not affect the other provisions of the act under which the petitioner is held in custody.

There are no other points that require notice.

The petition is denied and the petitioner remanded to the custody of the Chief of Police of the City and County of San Francisco.

SHAW, J.

We concur:

VAN DYKE, J.
ANGELLOTTI, J.
McFARLAND, J.
HENSHAW, J.
LORIGAN, J.

"Alcohol" Tonics. The fact that these "patent medicines" will sometimes give a supposed sense of relief, or tone up a sluggish system, makes them all the more dangerous. Why should they not stimulate and tone up, or soothe pain? The alcohol in these preparations often gives a sense of temporary well-being. Opium, as we all know, will soothe pain, while cocaine will stimulate and excite, making the beggar feel a millionaire. The mixtures containing these drugs are freely taken by people who would be outraged at the very thought of going into a saloon and ordering a glass of whisky.—Bok, in *Ladies' Home Journal*.

SOME REFLECTIONS ON STATE EXAMINING BOARDS.*

By W. S. THORNE, M. D., San Francisco.

It must be apparent to the interested observer that the events of the past year, in educational circles, mark an era of progress and reform. It is needless, perhaps, to remind this erudite assembly that the history of civilization, as it has moved upward in the scale of moral and intellectual growth, is the story of conflict with opposing and often malevolent forces. The histories of the dominant races of this century emphasize the declaration that every step of human progress, every discovery of science, every political reform, every liberty enjoyed by the people, have been opposed by strenuous factions and often upon sanguinary fields.

Conformable, therefore, to the precedents of social evolution, it comes to pass that the attempt on the part of a wise and conservative minority to abolish a recognized evil, affecting the most sacred interests of society, is met upon the threshold by the inveterate enemies of progress. But let us not be discouraged. The struggle for thorough preliminary instruction, as a basis for higher education in the medical and allied sciences, is fairly inaugurated. Experience already justifies the belief that the influence of independent examining boards must eventually purge the medical profession of incompetents, and close the avenues of a medical career to the ignorant and illiterate. The worth of any civilization, or the worth of any department of the social system, is the worth of the men behind it. By consent of society the medical profession stands in the front ranks. Its position exacts the most perfect rectitude and the highest scientific attainment. The growing demands upon medical men in the affairs of State, and the ever-widening domain of sanitary science, embracing towns, cities, rural districts, commercial relations, and the conduct and exigencies of war, stamp the medical function as fundamental in civic administration.

The influence exercised by the State Board of Medical Examiners cannot be over-estimated, when we reflect that the standards established by it must determine, to a large extent, the curricula of all teaching bodies, and the thoroughness of methods. This influence, as it is understood, applies not only to medical teaching, but also to the character and extent of preliminary education. It is generally recognized that examining boards are bound to take cognizance of illiteracy in applicants for license. In effect, therefore, independent examinations determine the extent and quality of fundamental training. In selection of medical examiners, the authorities should carefully consider the *personnel* of the appointees. A reputation for sterling integrity, and strict professional honor, should receive the first consideration. The board should be so constituted as to ensure the confidence of the profession and inspire public respect, and every detail of its administration should be characterized by the most scrupulous and exact justice. While an elevated standard of attainment should be required and maintained, the questions should be framed with the most conscientious regard to their fairness and propriety. The executive function of the Board of Examiners calls for the exercise of judgment, firmness and vigilance. It is manifest that the law fails in purpose and intent, if its mandates are not enforced.

The illegal practitioner avails himself of every subterfuge known to the law, and every device conceivable by unscrupulous tricksters, to evade the operation of the medical act. The board will be confronted by the startling fact that the illegal practitioner is frequently protected by the regular physi-

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

cian, who employs him as a silent associate, in nefarious and unprofessional enterprises.

The Board of Examiners empowered by the people of this great commonwealth to purge the medical profession of the ignorant pretender, and to enlarge the efficiency of a learned profession, will find that the quack and the illegal practitioner command both sympathy and assistance in certain quarters of the regular profession, and that even in court circles they assume to possess an influence which our experience fails to justify. The board will find these delinquents astute, resourceful, unscrupulous and tricky.

The time has come when the medical boards should seek a more strict and acceptable interpretation of the words "practice medicine." We should know our legal ground in this matter, which at the present time seems ill-defined. Mr. Tait, the learned attorney of the Board of Examiners, has, I am informed, made an exhaustive study of this question, and it is to be hoped that the matter will soon be settled by the courts. It is an essential duty of the Board to enquire most carefully of applicants for license touching a strict conformity to the law requiring full and complete courses of study in legally chartered medical schools, the requirements of which are in no particular less than those prescribed by the Association of American Medical Colleges at the time of granting such diplomas. In several instances applicants have come up for examination who had fallen far short of the legal requirements. Let the Board of Examiners indulge no sweet illusion that by a righteous and conscientious performance of duty it "shall escape calumny." The charge most prolific and persistent will be that of unfairness and discrimination. This of all allegations is, and I trust will continue to be, the most absurd and mendacious. We may well extend the hand of sympathy to the deluded youths who, by honied assurance of speedy methods to medical degrees, have parted with their time and money to no purpose; but the authors of such infamy deserve the contempt of every honest man; in them we behold the lust of greed and the lust of mendacity fittingly associated. The odium of failure to pass the State Board obviously rests with those institutions that persistently refuse to reform their methods of instruction, and to give full and complete courses. The failures of the different colleges represented in California in 1902 were as follows:

College—	Passed.	Failed.	Total.
University of California	30	1	31
College of Phys. and Surgeons...	5	9	14
California Med. College	1	5	6
Cooper Med. College	19	2	21
Hahneman Med. College	4	1	5
University Southern California ...	11	0	11
Percentage of failures, 20.43.			

The examinations for the year 1903 by colleges gives the following results:

College—	Passed.	Failed.	Total.
California Medical College	0	1	1
College Phys. and Surgeons	17	5	22
Cooper Medical College	33	3	36
Hahneman Med. College of the Pac.	7	2	9
University of California	17	1	18
University Southern California ...	22	0	22
Coll Phys and Sur., conditioned 3	3		
Cooper College ... conditioned 4	3		
Hahneman Med. Coll., cond. 1		1	
Percentage of failures 10.31			

It is encouraging to note an increase of nearly 50 per cent of successful candidates over those of two years ago, notwithstanding the fact that the standard of requirement has been in no wise lowered. It is

obvious, therefore, that the State Board has already exerted a beneficent influence upon all classes of medical men, and especially upon recent graduates who are drilled with reference to their state license. The unprecedented development of the medical and allied sciences during the past decade demands corresponding evolution in the methods of mastering and applying them; and those charged with the responsibility of imparting scientific knowledge to the rising generation should furnish the student with every advantage for practical and experimental work. The student must first *know*, and after, practically and rationally *apply* his knowledge, in the clinic and laboratory. Medicine today is applied science. Theory with practical and experimental methods must go hand in hand. Radical changes in the present system of medical instruction are necessary to meet the increasing demand for higher attainment in medical knowledge. Let the birth of the twentieth century behold a united profession pressing forward to higher attainments, and toward loftier ideals. Inertia is the most malevolent force in nature. We cannot stand still; we must progress. We are impelled upward by irresistible forces. What is needed in medicine, from the standpoint of sociology, is the true scientific spirit clothed with human interest.

The matter of reciprocity between the several States is at this time our unsolved problem. In the interest of justice and fair dealing, it is one that should engage the most serious and earnest attention of the profession looking toward an early solution. The experience of the past three years teaches us that great hardship and injustice result in the operation of the present law, as applied to men of recognized standing in the profession who graduated ten or twenty years ago. It is obvious that such practitioners should be admitted to a legal status under easier conditions than the recent graduate. As a remedy for this unequal operation of the present system, it has been suggested that a double set of questions be given, one set to the graduate just from college, and the other to men in practice ten years and upward. This plan has been adopted in one or more of the States; our law, however, gives no such power to the Board of Examiners. Reciprocity between States would, through the discretionary power in the board, meet this urgent requirement; but the variation in the standard of attainment in the different States, often much lower than our own, renders the admission of candidates for examination under such conditions impracticable. We should still strive, however, for a solution of this vexed problem.

DISCUSSION.

Dr. Dudley Tait, San Francisco.—In an artistically arranged concert program, a classical selection is generally followed by a simple theme. I am forcibly reminded of this fact after hearing and applauding the eloquent periods of my learned friend and very efficient colleague, Dr. Thorne. I therefore crave your attention to the recital of a series of plain facts.

The Medical Act went into effect August 1, 1901. During the first year of its application, the Board of Examiners gave especial attention to the subject of examining applicants for license, dealing leniently with offenders of the law in order that the public and also the profession might become better acquainted with the new restrictions placed by the legislature upon the practice of medicine in this state. Furthermore, it was deemed prudent to follow this policy in view of the fact that the courts, juries and district attorneys regarded with marked disfavor the new law, and especially its enforcement by a body of medical men. Again, from the very onset, the board, in seeking judicial interpretations of several sections of said

law, was confronted with innumerable writs, appeals, demurrers, etc., closing the police courts to further prosecutions along these lines. During the past year rulings have been handed down from three superior courts of San Francisco, sustaining in every particular the stand taken by the board. Consequently the work was resumed, and in the current number of the CALIFORNIA STATE JOURNAL OF MEDICINE you may have noticed some of the results of said work. The true effect of the work is not, however, apparent in this published report, for today the conditions in the police courts have radically changed. So much so, that the filing of a complaint by the board is almost equivalent to a conviction. The police court shysters are no longer willing to advance bail to illegal chaps; the juries extend them no sympathy; and the judges are not averse to sending them to jail whenever the amount of the fine is not immediately forthcoming. The illegal tribe is fast moving towards two places; first, to Oakland, where licensed practitioners protect them and give them a character when they appear in court; second, to Nevada, where a vast army of them await a sign from the Supreme Court in order to swoop down upon us. On the other hand, the number of applicants has almost doubled during the past year. We now possess thoroughly the technic of radical cure of illegal practitioners and the board is particularly desirous of placing this practical knowledge at the disposal of all component county societies, believing that this work of prosecuting should be undertaken by them, under sanction of the Board of Examiners. Whenever a prosecution is made by an official body or medical society—in other words, when the profession endorses the complaint—a conviction is sure to result.

Dr. Thorne has enumerated some of the qualifications required of an efficient member of a board of examiners; permit me to add two: First, a thorough knowledge of the law regulating the practice of medicine in this state, and its practical workings; second, an irrevocable determination to apply the said law in its entirety. I refer feelingly and with emphasis to the application of the entire law, mindful of the fact that in taking office a member of the board swears before a superior court judge to do his duty in relation to the law in question. The deeper the study of our medical act, the greater is one's admiration for the wisdom of those who framed it. Founded on the best features of several state laws, our medical act has frequently been referred to by Eastern experts as an ideal statute. Unlike many state laws, it does not confine its role to the examination of applicants for license. It goes much further and in the only logical direction—backward. It considers credentials, and the all-important question of preliminary education. To confine oneself to the examination of applicants and to ignore credentials and preliminary education is, you will admit, illogical because it attempts the purification of a polluted stream at its mouth instead of at its source.

As illustrative of the urgency of applying the law in its entirety, I may cite the damnable frauds perpetrated on your board by two San Francisco colleges which recently joined hands with the charlatans in the Supreme Court. These colleges issued diplomas after only one and two years of study, advanced standing having been granted upon an osteopathic license. Applicants for license have perjured themselves in their affidavits, and thanks to the duplicity of our secretary, an eclectic, they have been admitted to take the examinations. Another fact that savors strongly of fraud is the selection of board members from the faculty of the eclectic school of San Francisco, a body of men who make a specialty of giving employment to illegal practition-

ers. Our secretary has always had one or two illegal practitioners to assist him in his office or outside work. Notwithstanding the consequent notoriously unfair marking of papers the eclectic school of San Francisco has only succeeded in presenting one candidate who successfully passed the examination, and he had been in Cooper College for three years. At the present time he is practicing "mental science." The board passed on his papers, not on his sanity.

So much for the character of the board, and the almost complete wiping out of a college. It has been asserted openly that discrimination is resorted to among the applicants. This is, in a measure, true. On several occasions we have had to examine men 60 and 65 years of age, members of the Grand Army, etc., and in these instances many, if not all of the examiners, have asked the secretary for the applicant's number. As a test of the fairness of the examination, permit me to inform you that the percentage of rejection has remained almost stationary notwithstanding the constant rotation of subjects.

In the matter of complaints, the Board regrets to say that almost all communications addressed to it are anonymous, and in each case the board is compelled to build evidence upon the meager information thus cowardly given. In other words, the board must assume the entire risk of failure to convict, with the possibilities of a counter suit for damages for malicious prosecution, libel, etc. Such were the conditions in all the cases tabulated in the current number of the STATE JOURNAL. The apathy of the profession is a matter of alarm and regret to those who have become interested in the welfare of the profession, and some of us may be permitted to ask if the Society truly desires the maintenance of a high standard of medical legislation and licensure. What will be the effect upon the public and upon the courts if the Medical Act does not meet with the support of the body to which it owes its origin? I may say that more progress has been made in two years of legislation in this state than in twelve years in New York or fifteen years in Massachusetts. It is for you, gentlemen, to determine what the policy of the new board shall be. To those who view suspiciously, or fail to understand the vigorous campaign of the present board in the face of the foulest calumnies and basest insinuations, I would say that the echoes of the Santa Barbara meeting have not fallen on ungrateful ears, and the long hours in the foul air of the police courts were in no sense more onerous than the days and nights passed in the lobbies of the Legislature by those to whom we owe the Medical Act. They set the example for personal sacrifice; we merely followed.

Dr. W. S. Thorne, San Francisco.—The keynote has been happily illustrated in Dr. Tait's comparison of purifying the polluted stream at its mouth instead of its source. If we depend upon our examinations to purge the profession, it is like commencing at the mouth of the stream. The most important thing is the preliminary and educational training which a candidate brings to his medical studies. It is a well-known fact that a bright, sharp man will take a coach, and with a very little time and no fundamental knowledge, may cram for an examination, and pass. Our insistence upon preliminary qualifications under the terms of our law I conceive to be one of the most important. It may seem strange that complaints have reached your ears of the Board of Examiners in their relation to applicants and members of the profession. If we who have passed two years in the fire come away with only the smell of smoke, I think you may consider that we have done pretty well.

CASES OF PROSTATIC CALCULI.*

By GEORGE CHISMORE, M. D., San Francisco

THE PURPOSE of this paper is to bring before you two cases of calculus in the prostate gland. Those who are engaged in a special practice in this direction will know how rarely such cases are met, and will be interested in the details of those that occur.

Case 1—A. L. B. came to the Waldeck Hospital on September 10, 1890, under my care. He was 61 years old, and a farmer, owning a fruit ranch. He had been healthy during his life up to five years ago, when he began to pass water more frequently and with some slight pain. These symptoms gradually increased in severity and frequency until he arrived at his present condition. He is a large man, apparently in excellent health in all other respects. He now voids a little urine every few minutes, and it dribbles from him nearly all the time. The urine is foul, clouded with pus and blood. He is in almost constant pain, but not so bad as to require opiates to check it. The day he arrived I operated by median perineal section, and with little difficulty removed five oxalate of lime calculi; the largest measured $2 \times 1\frac{3}{4}$ cc., and weighed 161 grains; the other four were small, and all together weighed but 20 grains. The largest stone was so thoroughly encysted in the gland that only a very small surface presented into the urethra, and that explained what had puzzled me when the metallic searcher was passed; it found nothing when it went into the bladder, but touched it on the way out. I am very sorry not to be able to show the society these stones; but when this man recovered he went home, and after several months sent to me a request to let him have them to show to his family; it slipped my mind, and that was the last of it. Although the wound was almost a clear-cut, and there was no loss of blood, it was very slow in healing. There were no complications, but he remained under my care and that of Dr. Harry M. Sherman, who was my assistant in the operation, for a period of nineteen days.

Case 2—Judge C. G. S., age 77. He came from the country on October 19, 1903, and went to the Waldeck Hospital. I saw him at once. He was strongly built, rather tall, and well preserved for his age. He explained: "I have been well for the most of my life, but for several years have had trouble with my bladder, which gradually got worse and worse, until I could not stand it any longer." His former doctor had advised him to come to the city and see me. He also said, "My doctor told me I had stone, and wanted to cut me, but I felt as if I was too old for the knife." His wife, who nursed him most tenderly, said that he was obstinate, and that it was very hard to change his mind. He did, however, and the operation was performed that day. He was incontinent, and wore an urinal, suffered a good deal of pain, and was subject to painful priapisms. There was no difficulty attending the median perineal section, and the calculi here presented were quickly removed. He got along fairly well for the next eleven days, when his obstinacy caught him, and, though by no means in a fit condition, he left the hospital and the city, rode several hours to his home, and his subsequent course is better told by himself than I or any other can tell it for him. Names and places are omitted for obvious reasons, the rest is verbatim. The urine referred to was 32 ounces for 24 hours, voided eleven times, nine by day and two by night; reddish yellow, cloudy, normal odor; acid 10.18; slight trace of albumen; 18.24 grammes urea; a rather copious sediment of pus, and a few blood cells.

March 21, 1904.

"George Chismore, M. D.—My Dear Sir: I left the Waldeck Sanatorium October 31, 1903, and arrived at my home the same day. My wife cared for and dressed my wounds as directed. The urine continued to pass part through the wound, but the greater part of the urine passed through the penis for three weeks and a few days more, when my wife discovered granulations on one side of the wound, when she called in the doctor. He said, after examination, there was every indication that a urinary fistula would form there if let alone. He operated and cut and scarified the wound, and said if it did not heal up in eight or ten days it would not heal at all. Then, in order to prevent a fistula, I would have to go to bed and have a nurse; that he would have to scrape the tissues down to new flesh, otherwise a fistula would form there and become permanent. The wound did not heal up in eight or ten days, but it did heal up in about three or four weeks thereafter, and in about two weeks thereafter two small abscesses formed on the upper edge of the wound. Then the doctor opened up the wound again, so that the urine could come through the wound again; and he said then that a fistula would form there; and rather than to go through the operation of scraping

down the tissues, I had better use a pad and let the fistula form there; that it would not weaken me any, and would be but little annoyance, and that I could then commence business. About three weeks after that the wound healed up, and twelve weeks have passed since and there are no indications of any more trouble with the wound. The water passes moderately freely without any pain, except to dribble a little after passing the urine. The doctor is very much surprised to find out that the wound is entirely healed up without having a fistula there.

"I have sent you by express to-day the urine for 24 hours. When I take up a shovel or pick and shovel or dig a little dirt in the garden I can feel a sensation about the neck of the bladder, and want to urinate oftener than I do when not exercising.

"I hope this will be sufficient history of the case to give you all the information you want. Respectfully, etc.,

"———."

DISCUSSION.

Dr. Granville MacGowan, Los Angeles.—This is the largest stone I have ever seen. I have removed forty prostates, and I think four contained stones. There was one patient seen by Dr. Chismore, who subsequently went to New York, and there someone found a pocket in the prostate and removed, I think, 100 or 200 stones. He had a great deal of trouble in getting it healed up. He returned to New York, and was examined there by prominent surgeons, who said he had tuberculosis of the bladder. I examined him, and told him that he had an enormous prostate, and that I would take a chance on his having tuberculosis of the bladder. When I got into the prostate I did not find any loose stones, but stones in the prostatic substance, little gravel, 100 or more, around in the substance. Another patient had been operated upon by a surgeon by suprapubic section. The stone was removed, and in about three months he was brought to me by his physician. I found he had an enlarged prostate and a stone in the bladder. I found the prostate hard, only indurated, and could not get the stone crushed through it. I thought I would take it out. I opened the prostate, and as soon as I commenced to dissect out the prostate found it full of stones that looked like broken pieces of granite. There were probably twenty or thirty. I found the stone in a pocket in the bladder. He frequently has stone in this pocket now. In two other patients I found stones that could not be reached at all. It has seemed to me that perhaps in some of these cases where stones are present, that tuberculosis may have preceded, and that these concretions may have simply taken the place where the tuberculous foci were.

Dr. M. Krotoszyner, San Francisco.—I saw a case in a man about 70. I performed a prostatectomy, then opened the prostate capsule, and little calculi came out. There were ninety-nine that were lodged in there. That patient got along very nicely, and later died from pneumonia.

Dr. E. E. Kelly, San Francisco.—This case reported is very interesting indeed. I would like to call attention to a method of reaching the prostate and that region which has been reported by Dr. Young of Johns Hopkins. It gives very easy access by reason of a "V-shaped" incision which allows him, with his prostatic retractor, which he passes into the bladder, to bring down the prostate so that it can be enucleated in plain sight. He also leaves the prostatic urethra intact, thus saving the openings of the seminal ducts. His method removes the objection "of working in the dark" to the perineal route of reaching the prostatic region. Dr. Chismore's case is particularly interesting because of the unusual size of the stone.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

MALARIAL NEPHRITIS.*

By GEORGE F. REINHARDT, M. D., Berkeley.

NEPHRITIS from malarial poisoning is not uncommon, but is not always recognized as malarial in origin. It is patent that in many cases of nephritis the real cause is never determined, whereas it might be if physical and laboratory examinations had been made more carefully. Treatment will surely be more intelligent and successful when the infection or the toxin producing the renal disturbance is definitely known, than when medication is applied by guesswork. What makes it the more important that a malarial nephritis should never be permitted to pass undetected is that in quinin we have a specific means of destroying the toxin-producing parasite. With a specific cause-removing remedy at our hand, how certainly it must follow that correct treatment will save many a patient from a chronic nephritis and an early death.

How important a factor malaria is in the production of nephritis is shown by Thayer in his monogram on "Nephritis of Malarial Origin." He found 21 cases of acute nephritis in 758 cases of malarial fever. In 112 cases of acute nephritis under observation at the Johns Hopkins Hospital, 21 cases, or 18.7 per cent, were found to be of malarial origin. Of the 21 cases, Thayer believes that 4 may have developed later into a chronic form. Moore of Galveston, Tex., reported that 47.35 per cent, or 18 out of 38, patients with malaria treated in the John Sealy Hospital had albumin and casts in the urine; 68.7 per cent of the patients infected by the estivo-autumnal parasites were found to have nephritis. The literature on malarial nephritis gives the estivo-autumnal infections as the cause of the larger percentage of nephritis. About 3 per cent of all malarial cases are estimated as having nephritis as a complication or sequela.

Marchiafava and Bignami, in the "Twentieth Century Practice," speak of our knowledge of the pathogenesis of the lesions found in malarial infections of the kidneys as theoretical. Ewing, in the following statement, gives about what we know of the pathology of malarial nephritis:

1. Acute degeneration of toxin origin often reaches a degree in which exudation of blood serum into the tubules is added. This lesion is responsible for the majority of cases of malarial nephritis.

2. Extreme forms of acute degeneration with focal necroses, hemorrhages and exudation into the tubules of blood serum and blood pigment. This is the lesion found in hemoglobinuric malarial nephritis, and may be associated with very few parasites in the capillary vessels of the kidneys.

3. Massing of parasites in the renal capillaries with extreme degeneration of the parenchyma, hemorrhages and exudation of blood serum into the tubules. Of this type few cases are found.

Both Barker and Ewing have reported one case each where the parasites were found massed in the kidneys. But such cases are rare, these two being about the only ones reported. In pernicious infections with grave changes in the epithelium very few parasites have thus far been found. It will thus be seen that malarial nephritis must be produced by the toxins developed in the malaria-charged blood in the majority of instances. The pathological picture is that of a diffuse nephritis.

A nephritis accompanied with high fever should always be carefully investigated, because fever is not a symptom of nephritis, but when present is generally due to the primary condition which caused the nephritis. A negative blood examination is not sufficient to rule out malaria, because a history of exposure to malaria and an enlarged spleen would justify the administration of quinin, with prospects

of a good result. Moffitt verbally reports three cases of nephritis where the blood examinations were negative, but other symptoms suggested malaria as a cause for the nephritis. The nephritis quickly cleared up when quinin was given.

I present the following cases as examples of malarial nephritis. The diagnosis is fortified by the fact that with quinin recovery was brought about in each case. This in itself would be sufficient evidence of the malarial nature of the nephritis without the presence of the parasite being determined:

Case 1.—F. A., male; aged 26 years; a school teacher in the upper Sacramento Valley; family history negative; measles and chicken-pox as a child.

Complaint.—During the latter part of November, 1901, the patient began to feel languid and tired. This he ascribed to overwork. Later he suffered from headaches and pains in the back and legs. Less work and more out-of-door exercise did not improve his condition. By sheer force of will he taught till December 20th, the end of the term. He then came directly to his home in Berkeley, and went to bed. He does not remember having had any chills, although he had chilly sensations lasting for a very short time during the early part of the sickness. Not until one week before his return home did he feel feverish. About this time he noticed that he was passing less urine than before, and that it was unnatural in color. With this began a puffiness of the face and a swelling of the feet, which made it difficult for him to wear his shoes.

Physical Examination.—There was a sallow hue to the dry and harsh skin, suggesting malarial cachexia. The edema was marked in the face and extremities; some ascites; no cardiac hypertrophy; no increase in splenic dullness. Albuminuric retinitis was suggested by the slight congestion of the disk and haziness of the retina. Pulse, 95; temperature, 101.2 degrees.

Urine.—Dark and cloudy; acid; 1028; albumin, 1.2 per cent Esbach's albuminometer; no sugar; no diazo reaction. Sediment: Hyaline and epithelial casts; the field well covered with red corpuscles, and a few epithelial cells.

Treatment.—I regarded the patient as suffering from an acute nephritis, and began treatment accordingly, putting him on a milk diet, infusion of digitalis with bitartrate of potassium and hot air baths. For four days this treatment was kept up, with no improvement except an increase of 50 c. c. in the twenty-four-hour urine. The temperature would vary from 100 degrees, in the morning, to 103 degrees, in the evening. In the night of the fourth day the patient had a severe chill, followed by a temperature of 104.2 degrees. The following morning I made a blood examination, and found the estivo-autumnal parasites; 5 gms. quinin in solution was given every four hours, with a telling effect on the temperature, which gradually fell to normal in five days. The edema rapidly disappeared, and in two weeks the urine was free from albumin, and normal in amount; but a few hyaline casts could be found.

Case 2.—E. M., aged 20; a student whose home is in Illinois, returned to college in August, 1902. He was not well when he arrived in Berkeley. He had chills and fever while at home, and was given quinin in capsules. He took the quinin steadily for two months. I saw him for the first time on August 28th. He complained of feeling hot, and of having vomited several times during the night. No chills for three weeks. Family history, negative; had scarlet fever, diphtheria and measles before the age of 12 years.

Physical Examination.—The patient was a slender and pale young man; skin hot and dry; some puffiness about the eyes and a very little on the ankles; flat chest, with some depression at lower end of sternum; thorax negative; liver dullness extended to margin of ribs in nipple line. The spleen enlarged so that the lower margin could be palpated; examinations of the eyes, negative; pulse, 106; temperature, 104 degrees.

Blood.—Repeated examinations did not disclose any malarial parasites. Hemoglobin, 75 per cent (Dare instrument).

Urine.—Very cloudy; acid; 1018; albumin, .6 per cent; sediment: blood, hyaline and granular casts and calcium oxalates.

Treatment.—1.0 grm. of quinin was administered intravenously morning and evening for two days, then .3 grm. every four hours in solution by mouth. On the third day the temperature reached 99.4 degrees, and on the following day it was normal. In three weeks the nephritis cleared up, and the patient has been well ever since.

Case 3.—E. H. B., aged 28 years; civil engineer. He had been on a railroad survey in Southern Texas, and was passing through Berkeley on his way to Nevada on a similar mission. Apoplexy caused his father's death.

*Read at the thirty-fourth annual meeting of the State Society, Paso Robles, April 19-21, 1904.

He had had chicken-pox and whooping cough when a child.

Complaint.—For five months before leaving Texas he had been having irregular chills and fever, but never severe enough attacks to keep him from his work. Of quinia he had taken very little, because .33 gm. a day would make his head very uncomfortable. For three days before I saw the patient he had been having daily chills. A sudden change in the color of his urine and a great decrease in the amount passed daily alarmed him; in forty-eight hours he had passed only 420 c. c. For twenty-four hours there had been frequent vomiting; the patient was restless, and tossed about a great deal. The family said that he had been talking incoherently at times.

Physical Examination. The patient was of stout build, and about 6 feet high. He was very nervous; some twitching of the muscles of the face; tongue heavily coated, and a foul breath; eyelids puffy; no edema of extremities; respiration, 36; pulse, 112; temperature, 103 degrees; thorax, negative; liver and spleen both enlarged.

Blood.—The estivo-autumnal parasites were present in large numbers.

Urine.—Highly colored; acid; 1015; albumin was present, but the amount not large; no quantitative test was made; the blood and epithelial casts were abundant.

Treatment. Pilocarpin sweats, caffeine citrate, quinin intravenously and milk diet quickly restored the patient's health. Sodium bromide was given to offset the head symptoms produced by the quinin. At the end of three weeks the albumin had disappeared from the urine, but now and then a cast could be found.

DISCUSSION.

Dr. W. E. Bates, Davisville.—There is not much in a paper of this character for one to discuss. We have a well-known fact to consider, and that is the presence of nephritis in a percentage of cases. It is not the germ but the antitoxin of the germ that produced the nephritis, as the doctor has already stated. Malaria may be an etiological factor in cases of nephritis to the extent of about 10 per cent. This percentage in a malarial region may be doubled. We find that in about 50 per cent of malarial cases we have albumin in the urine. The author remarks that a nephritis accompanied by high fever should always be examined carefully. I had a case in a man 52 years of age, living in a malarial region, who had an afternoon temperature not exceeding 100. There were albumin and casts in the urine. He had malarial cachexia. I gave him quinin in capsules at first; then hypodermatically, which cured him. The author seems to favor intravenous injection, which I have never used. I do believe in quinin in solution, and if necessary hypodermatically.

Dr. Reinhardt, Berkeley.—I would like to express, in closing, a plea for more careful examination of our patients. We have a remedy which can benefit these patients very positively, and it is well to be sure that we are not overlooking any cases.

PATHOLOGY AND ITS RELATION TO THERAPEUTICS.*

By E. S. PILLSBURY, M. D., Los Angeles.

IT HAS been stated that while the study of pathology has materially advanced our knowledge of disease, and has made a science out of the art of intuitive diagnosis, it has added nothing to the bulk of our therapeutical remedies.

The older practitioner will say of pathology: "Yes, it is a good thing to know, but I have not the time to hunt for bugs in everything. I can tell when albumin or sugar is present in the urine, but what is the use of the rest of it?" The older surgeons say they can locate pus, and drain the cavity. If the pus is "sterile," the patient will get well; if not, and "blood poison" sets in, swabbing out the cavity with carbolic acid or bichloride solution, and then watching the foam bubble up after pouring in the peroxide, is the proper antiseptic treatment. The use of the horse serums is one of those new fads, and forty

years' successful practice without them should demonstrate their non-necessity, if not their uselessness. If it is a tumor to be removed, what difference is it, the variety, so long as it is out?

All modern practitioners are willing to admit that the doctor who knows most of pathology, in its fullest sense, is the most competent diagnostician; many realize that the best surgeon is the one who knows most of pathology, and there are a few who appreciate the relation of pathology to therapeutics.

It is remarkable how few there are who conceive of the term pathology in its full sense. Few realize that it may include chemical and physiological, as well as anatomical, conditions. For obvious reasons, all classroom work in the average medical school is devoted to a rather superficial study of anatomical pathology; four courses of eight months each on the top of the best entrance requirements could be devoted to training in the various branches of pathology, and the time be most profitably occupied. Were all medical men so educated in physiological, chemical and therapeutical pathology, there would be no such thing as prescribing such combinations as "neurilla," "manola," "bioplasm," "chiona," "peruna" or "Hood's Sarsaparilla"; neither would a medical man use antikanina, salferne, phenobromate, acetanilid comp., etc., one after the other, to drive away the same headache.

Pathology has too long been considered a study of death rather than of disease. Huxley has said: "There can be no doubt that the future of pathology and of therapeutics, and therefore of practical medicine, depends upon the extent to which those who occupy themselves with these subjects are trained in the methods and impregnated with the fundamental truths of biology." This can be obtained only through the knowledge of the chemistry and physiology of life.

The growth of the doctrine of toxins forced upon us by modern experimentation in bacteriology may be found in every new text-book of therapeutics. The recent studies in the action of toxins and antitoxins, on the study of immunity, on the nature and causes of diabetic coma, uremic poisoning, autointoxication and other pathological conditions have demonstrated new uses for old therapeutic measures; while the rapid strides which have been made since Koch's discovery of the peculiar action of tuberculin, in our knowledge of resistance and susceptibility to infection, and of the factors which produce immunity during the course of the infectious diseases, have led to the discovery of wonderfully subtle and effective substances which influence the course of disease. These discoveries have shown us the impotency of most of our efforts to obtain artificial therapeutic substances to hurry immunity and the consequent recovery, as well as showing to us the innate power of the organism to develop its own therapeutic substances within the body, which act with unflinching accuracy, to antidote the special poisons then present. This energy of animal life cannot create energy within the sick body, but only tide over the prostration of its mechanism of defense.

Arrhenius and Madsen have shown that the same laws govern the reaction occurring between toxins and antitoxins as occur in ordinary chemical processes; the law of mass action prevailing here as in other reactions.

Another point lost sight of by so many therapists is that the body, in its perfect condition, consists essentially of one and the same kind of elements variously modified. Thus it would appear that a drug capable of affecting the functions of these cellular elements, in any one stage of development or specialization, will likewise affect them in any and all

*Read before the Southern California Medical Society, May, 1904.

stages of modification or specialization, so that certain drugs capable of acting, in proper dose, as function exciters, may, in other dosage, act as function depressors upon all of the great organ systems, the particular system affected depending on the size of the dose. An admirable instance of this has been developed by Crile in the use of strychnin. In minute dosage it has been found to be a function exciter, while in large or continued doses it acts as a depressor, especially on the vasomotor centers.

Pharmacists and chemists are continually producing new compounds for which they are trying to find some use, and consequently a market value. A few good things have been found in this way; but for the reasons given above, scientific therapeutics has received little help from this source. It is not in the discovery of new remedies, but in the determining of the reasons for using any therapeutic agent, that pathology is now chief in the science of medicine and surgery.

It is needless for me to rehearse the discoveries of the various antitoxic serums, nor to claim them as the result of pathological investigation. The subject of immunity has been developed by the pathologist, and the discovery of the immunizing and antitoxic serums has been the result of pathological experimentation. Dead bacteria or their extracts or bacterial culture products are used successfully in the treatment of sarcoma, in cholera and in plague. Could the chemistry of immunity be brought into the realm of substances which can be satisfactorily analyzed, the possibility of constitution formulae would be most alluring. We would have made a long step toward the Fountain of Youth so diligently sought by the romantic Ponce de Leon.

A discovery of as great importance to the surgeon trying to resuscitate a patient dying of shock, as the discovery of the serums was to the physician treating diphtheria, is the discovery of the blood-pressure raising principle of the adrenal gland, and the reasons for its use.

Addison was the first, in 1855, to point out the great importance of the adrenal glands to the animal economy, showing that the disease now bearing his name was due to lesions of these bodies. Attention thus attracted to these glands has developed the fact that they secrete a substance which apparently controls blood pressure through the sustaining influence it exerts on the vasomotor center. Until recently the pathology of shock has not been understood, for the reason that no distinctive lesions are demonstrable at the autopsy. The gross appearances are those usually found in cases of sudden death or death from exhaustion. The heart may be stopped either in systole or diastole. The brain may be either congested or anemic. The lungs are usually in a condition of congestion and edema, which, however, may be due to the anesthetic. The blood is dark and fluid in consistency; immediately before death the blood from the arteries is as dark as that from the veins.

It is needless for me to describe the clinical picture of shock; exhaustion in every feature and function; the anxious expression, pinched face and pale, drawn lips; the cold beaded sweat and glassy eyes are familiar nightmares to all of us, when, after finishing a difficult operation, we look to the condition of the patient with the hope that the work will not be for naught. Crile, in a series of most interesting experiments, has demonstrated that shock is a condition of physiological pathology consisting in a diminution of the blood pressure due, not to exhaustion of the heart muscle, nor of the cardiac centers, nor of the blood vessels, but to an exhaustion of the vasomotor centers. Kinnaman has demonstrated

that the degree of shock may be measured by the temperature of the body of the subject, and that the increased loss of body heat incident to contact with cold during an operation results in a greatly increased degree of shock.

Given the cause, the treatment is simplified. Crile has carefully determined that one is not justified in attempting to reduce or treat shock by the routine administration of the so-called shock tablets, or even physiologic salt solution as usually given. He has demonstrated that in shock, alcohol produces a further depression; the same was proven with nitroglycerin and amyl nitrate. Digitalis will sometimes cause a slight rise in blood pressure; but from too large a dose the heart will become irregular, and death may come suddenly from cardiac failure. Strychnin will sometimes give a slight rise in the blood pressure, the effect lasting but a few minutes, when the blood pressure falls to a lower level than before the injection was given. In any degree of shock, after the administration of the therapeutic dose of strychnin, the animals passed into deeper shock. It was further demonstrated that strychnin caused death in shock by exhausting the vasomotor centers.

Crile states that there is no practical distinction to be made between external stimulation of this center, as in injuries and operation, and internal stimulation by strychnin. A statement of this nature cannot be made too emphatic. We, all of us, have seen strychnin given empirically when it must have been injurious, if not fatal. I have seen it given when the pulse was too weak and too rapid to count (the heart beating 190 per minute as counted by the stethoscope), in doses of 1-30 grain every hour. The heart rate was slowed from the paralysis of the vasomotor center, and because of this slowing the physician in charge continued the drug.

Ever since Oliver and Schaffer first announced the remarkable action of suprarenal extract upon the vascular system investigators have been working on the extract, and have found it to be the most powerful vasoconstrictor, as well as the most active cardiac stimulant known; but it remained for Crile to demonstrate the remarkable results to be obtained from its use in shock. He has shown that in the normal animal in every degree of shock and collapse when the medulla was cocaineized; when, in addition, the spinal cord was cocaineized; when the cord was severed, and when, in addition, the medulla was destroyed when the splanchnic nerves were severed; when the heart, the respiration and the vasomotor action were arrested by 2300 volts of an alternating current; when the animal was decapitated, and when it was apparently dead as long as fifteen minutes, epinephrin administered intravenously caused a rise in the blood pressure.

It has been my privilege to use epinephrin solution after nine of the laparotomies I have performed during the last three months with the result of markedly lessening the shock and hastening recovery, giving it hypodermatically five to ten drops in salt solution every hour until evidence of shock had disappeared. The application of heat I consider of utmost importance as a prophylactic measure as well as for treatment of shock; and I may here mention that in the hospitals of Los Angeles I know of not one heated operating table. The patient, clothed only in a nightgown, is brought into the operating room, which, without special instructions from the surgeon, is rarely over 80 degrees Fahrenheit (and I have seen it as low as 65 degrees Fahrenheit), and put on to a cold metal or plate glass table which is covered with a folded sheet. Rarely are any means used or obtainable, with much loss of time, to restore, or even maintain, a normal body heat, and yet many

surgeous wonder at the amount of shock from a comparatively slight operation.

Epinephrin solution has been used in pneumonia with particularly satisfactory results; just before the crisis, when the heart shows signs of exhaustion and the blood pressure is far below normal, the intravenous infusion of epinephrin in physiological salt solution, 1 to 100,000, will raise the blood pressure to normal and hold it there for about twelve hours.

Sajous states that the long line of research into the physiological action of some forty of the more important drugs and venoms has brought out a similarity of the action of poisons, including toxalbumins and venoms, to the phenomena that ensue after the experimental removal of both adrenals or of hemorrhage into these organs. Sajous undoubtedly refers to the depression and chemical shock to the system coincident with the absorption of the poison, so that epinephrin solution would be indicated to alleviate the shock. Again, Klapp has shown that epinephrin inhibits absorption, another reason for its use in poisoning.

Josue has suggested that arterial atheroma might be due to the pathological action of the suprarenals when he observed that high tension which is induced by the injection of epinephrin. This theoretical assumption was corroborated by experimental research, and now he announces that the necropsy of three subjects with arterial atheroma still further confirms it. All three exhibited the anatomic evidences of hyperfunction of the suprarenal capsules. There will undoubtedly be many adverse reports regarding the use of epinephrin solution in disease of the heart because so few take the trouble to measure the blood pressure before prescribing. Epinephrin is not indicated in conditions of excessively high blood pressure.

Another gland which is now being investigated as to its use in the animal economy is the thyroid; it is probable that an extract will be separated from this gland that will rival the adrenal in its importance; for while it has been shown that the adrenal is our most powerful vasomotor and cardiac stimulant, I believe an extract will be obtained from the thyroid that will be a physiological opposite of epinephrin, and be of much use in those conditions of excessively high blood pressure such as are found in arteriosclerosis, some forms of nephritis, diabetes mellitus and other nutritional diseases.

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Duty to the State.—I would earnestly plead, in addressing this audience, and especially the members of the high and honorable profession which has given this gift to the nation, that you never for one moment allow yourselves to forget that the well-being of the Republic ultimately depends on the way in which, as a rule and habitually, the best citizen of the Republic does his duty to the State; and that we have a right not merely to expect, but to demand, from our hardest worked men, from the leaders of the great professions, the full performance of that public service, which consists in a zealous, intelligent and fearless performance of the ordinary duties of public life by the ordinary private citizen.—President Roosevelt in accepting the Rush Monument.

REPORT OF COMMITTEE ON MEDICAL EDUCATION AND LEGISLATION.*

By H. S. ORME, M. D. Los Angeles.

AS TO the topic of Medical Education, it is our opinion that its present status in California is reasonably satisfactory. To the older members of our profession it is especially apparent that the means and results of instruction in the schools, within the last quarter-century, have grown far beyond what was expected. The action of the National and State medical associations in demanding a higher standard of proficiency, deserves the credit for this improvement, which has been gradually effected by extending the period of medical study from a nominal three-year course, of four months (generally an actual two-year duration) to a four-year course, with lectures during the greater part of all the years. Instead of merely a repetition of the annual didactic lectures, a graded course of lectures, combined with extensive laboratory work on practical lines, has been evolved, and clinical instruction has been magnified.

The emphasis laid upon laboratory and clinical instruction cannot be exaggerated, because of the need of equipment for immediate service. The conferring of the degree carried with it inferentially the elevation of the student to an equality with his teachers. While in fact this cannot be, yet in so far as concerns responsibility it may be. For in time of urgent need, whether medical or surgical, the most accessible help is first in demand. Hence it would seem wise, if it could be made practicable, as has been recently suggested by Drs. Osler, Holmes and others, before a license shall be granted by the State Board to require a hospital experience of six to twelve months.

It is within the memory of some here present, when there was no test of education preliminary to medicine, except first signing the college register and finally offering a thesis, which might not have been the work of the candidate. Under the system of forty years ago, it was indeed possible to earn legitimately a medical diploma without knowing A from B, though no instance is known.

Right here is the proper place to observe that the greatest defect in the equipment of medical men to command the respect and serve the wants of the communities where they live, is found rather in their general education than in their professional training. The nominal requirement of a high-school diploma, or its equivalent, would for the present be satisfactory; but there is good reason to believe that this condition is greatly relaxed. The explanation is, that medical examining boards leave the matter to the schools, and the professors are mainly dependent on student tuitions as compensation for their services.

It is both desirable and practicable that our profession should compare favorably with the legal and clerical in general education and culture; but in actual fact we have always ranked somewhat lower. The contrast is less marked now than it was formerly, but it will be our own fault if such distinction continue. The remedy is plain, but the schools should not be expected to apply it. The Board of Medical Examiners should be made responsible for the preliminary education of medical students, as well as for their professional acquirements, and this part of their duties should be discharged before registration in the schools, as is the case in England.

A good deal has been said latterly about reciprocity between the several states in respect to medical qualifications. California has already taken a right step in authorizing our medical board to pursue this course with other boards, and in time it may become custom-

*Read at the thirty-fourth annual meeting of the State Society, Paso Robles, April 19-21, 1904.

ary. In connection with the annual meeting of the American Medical Association there might be formed a joint organization of State Medical Boards to agree upon some plan for uniformity. In the course of a few years it could be put in working order, so that physicians migrating to other states need not be obliged to undergo the cost and trouble of renewed examination.

As to medical legislation, it is our opinion that the most pressing need is to make effectual the provisions already enacted. Various unprofessional acts are already defined as felonies and misdemeanors, but are practically condoned, inasmuch as the penalties cannot be enforced. Prosecution for the crime of procuring abortion is rare, from difficulty of obtaining proof, and conviction still more so, on account of legal technicalities. The unlawful practice of medicine by unregistered persons is open and flagrant, through faulty adjustment of penalties. These are points which require the best legal advice; and, since it happens that eminent lawyers fail to draw up sound testaments for disposition of their own estates, it is not strange that medical legislation should often, if not generally, be found defective.

In legislative bodies composed largely of lawyers, it seems reasonable to the average mind that judiciary committees might contrive to make a larger fraction of their work pass the ordeal of the courts. If law is a science at all, it must be shockingly inexact or monstrously difficult of comprehension; it would be a great advantage, were it practicable, to determine the soundness of laws before enactment.

The sale of poisonous drugs, especially opium and its derivatives, and cocaine, needs better safeguards to restrict abuse. Suppression is not expected, but it should be made more difficult to obtain them without the physician's order. Here again the trouble is in enforcement of penalties.

We would recommend repeal of the act of 1891, which provided for the appointment by the Governor, of an Attorney for the State and San Francisco Boards of Health, inasmuch as this office is intended and used solely to pay political debts. At the same session of the legislature, and also the previous session, the State Board of Health favored a bill providing for a State Sanitary Inspector, which passed both senate and assembly, but failed of executive approval. The plea of economy was the transparent subterfuge, in face of approval of the bill for an attorney, not needed for sanitary purposes, and useful only for political speeches. Despite this failure the need for this inspector is even greater than ever, and every legitimate effort should be made to effect his appointment. The National Bureau of Health is out of politics, and ready to give aid in emergency, as it has lately done. As to a sanitary survey of the State of California, it is not less needed now than earlier, but it is evident that political conditions and demands still threaten to interfere with the execution of this, and other important and legitimate functions of the State Board of Health.

Undoubtedly, it is proper that medical, and particularly sanitary legislation should keep somewhat ahead of public opinion; but we must not expect the latter to be led by the former unless they keep in sight of each other. We are therefore of opinion that legislative activity in matters of interest to the medical profession should be conservative, by making more effective what the law-makers have already granted. However, should the State Board of Health offer any further plans for the increase of its efficiency and usefulness, your committee pledge their coöperation in every way possible.

DISCUSSION.

Dr. Carl R. Krone, Oakland.—A report like the one we have just listened to cannot fail to enlist the at-

tention and consideration of every member of this body. It is not true, as some would have it, that we are only a scientific body, nor are we here merely for the purpose of renewing social and professional relations. The matters of medical education and legislation should have, and have had, the service and labors of the most prominent and most experienced members of the State Society. We younger men hear with pleasure of the advanced and advancing status of medical education in this, our state, and in other states. The chairman of your committee points to the relaxed condition existing in the requirements for entry upon medical studies. Even the high school diploma does not represent a reliable average of general education, still less a good average of special preparation for the study of the medical sciences. The aims in the individual branches are too high, leaving those who do not succeed in attaining them with a low average of general education. A medical education built upon such a foundation may succeed in the construction of a scientifically erudite mind, but it will have a tendency to leave it far below what is easily attainable to the students of the legal and clerical professions. The student in medicine, then, should have a more liberal education than the student in law or theology. I fear that if the requirements of a high school course were to be determined by a board of medical examiners this course, on account of our present tendency toward scientific medicine, would be arranged with a view to more special and less general education. What we need, however, is not a higher average of education in the classes, but rather the more general attainment of a perhaps lower scientific average of the masses. In Germany the aspiring physician must have the best classic education obtainable outside of a university and the educators of that country do not seem willing to yield to efforts made to bring about changes in this direction. I do not see how the Board of Medical Examiners in this country could be "made responsible for the preliminary education of medical students as well as for the professional acquirements," nor how "this part of their duties should be discharged before registration in the (medical) schools." As a substitute for or as a modification of Dr. Orme's idea, I would suggest that the Board of Medical Examiners hold an examination for students who have finished their second year of college work. Such examination corresponding to the German "Physicum" could embrace physics, chemistry, anatomy, physiology, materia medica and bacteriology, also one or two general branches as electives, such as English literature, Latin, Greek, German, French, botany, zoology, algebra, etc. If this examination be made a requirement for admission to the higher professional or final examination, men of unsatisfactory scientific or general educational attainments could be prohibited from attending a medical course for which they are unprepared. This test would also operate toward the equalization of the qualifications of all students of medicine whatever pathy they might afterward choose to elect. It would avoid the possibility of reproach of undue discrimination of the Board of Examiners against less favored schools, and would prepare a way for the ready interchange of students between the different medical colleges, thus tending to equalize the medical courses at these colleges. As an indirect result it would tend to influence preliminary education before registration in medical schools, as the aspirant would have before him in a not too distant future an examination of definite requirements. Thus Dr. Orme's desideratum would find indirect fulfillment. Interstate reciprocity, so much spoken of and desired, could be more readily accomplished as the "first medical ex-

amination" (physicum) could be made uniform in all states and for all schools, and would thus prove an insurmountable bar to empyrics, not by having to pass it repeatedly, but by having to pass it once. It could be made a much more rigorous test than the test before the state boards now is in the branches mentioned.

As to better safeguards against the abuse of poisonous drugs, it seems to me that the unlawful possession of the same and the evidences of unlawful use of the same are, or should be, punishable. Evidences could then be more easily adduced and penalties more readily enforced. When murder is committed with a gun, nobody thinks of accusing the maker or the seller of the weapon of murder, but the one who abuses the same is punished. The alcoholic who offends public decency should be put to hard labor and the rum-seller who encourages the abuse of liquor should be fined. The same holds true with regard to other drugs and poisons.

I hope that this meeting will not adjourn before it has formulated a request for a State Sanitary Inspector. The lowered death-rate of large cities is due to preventive medicine. "A commissioner of health of a great modern city is the greatest saver of lives," likewise a State Sanitary Inspector could be the greatest life-saver of our state, and if multiplied by the number of states in the Union, he could be, or rather they could be, indeed savers of life. I humbly and with all my heart endorse every thought which the honored chairman of this committee has brought before you today.

Dr. T. C. Edwards, Salinas.—I have come from the country, and probably we will be more interested in the improvement of medical education than those members in touch with the members in the larger cities. The step of increasing the standard of medical education is certainly a good one, but there might be some improvement made in the manner of determining the older practitioners who should be allowed to practice in our state. In our town two men went before the board and failed, and it seems to me that if I were required to take the examination, I would fail, too, though I suppose that I might be considered an average country doctor. The suggestion of Dr. Krone seems to me to be a good one; that is, that a man be required to pass an examination at the end of the second year; it would relieve him from having to pass that examination again. We naturally get rusty in many of these things. With regard to legislation, that can be handled very easily. There is no question but what, with thorough organization, it could be an easy matter. The average person in the country thinks that when a man asks for some act to be passed in the legislature, he has an ax to grind. There is no selfishness in the questions asked for here by these men, but questions of public good, and we should make the public see that it is for their good, for the prevention of disease; then it will be an easy matter for us to get what we want.

Dr. Wills, Los Angeles.—I did not hear this paper, but I heard the concluding remarks of the last speaker, and I think that if he had been at Sacramento with us he would have found out that you cannot convince the public. It is very hard to convince the general public. They seem to think that they know more than we do.

Plague in Check.—It speaks volumes in favor of the policy pursued in San Francisco by the joint health commission—national, state and municipal—in the record of no deaths from the plague in 121 days past; and yet, according to the daily press, there is quibbling over the pay rolls by a committee of the Supervisors.

ACUTE GASTRO-ENTERITIS.*

By CHAS. ANDERSON, M. D., Santa Barbara.

THIS true acute gastro-enteritis, or, as it is now the fashion to call it, gastro duodenal catarrh, cannot be scientifically demonstrated as being a specific and distinct disease; yet from the practitioner's point of view, it is an entity, serious enough to require his most earnest consideration, and demand his most careful treatment and care.

While the greater number of cases occur in children, it is by no means an unknown occurrence in adults, and I believe that it is not at all unusual to have it overlooked or mistaken for other troubles. It is not as common as simple acute gastritis, nor is it so easily brought under control; and though it can hardly be classed as being a highly dangerous disease, it is more to be feared than simple acute gastritis and the mortality is greater.

Etiology.—In children it is most frequently caused by unripe or overripe fruits and vegetables and other unhealthful foods, and sometimes from overeating of perfectly healthful stuffs improperly cooked. In adults (in men especially) it is caused by overeating combined with the overindulgence in alcoholic liquors. Champagne and shellfish are often the cause, but plebeian beer, especially when slightly sour, is as liable to blame as its more aristocratic kinsman. Cold and moisture are likewise said to cause it in many cases.

Symptomatology.—Soon after an overindulgence or an exposure to wet and cold after a heavy meal, there is a sense of heaviness or distension in the region of the stomach; which may or may not be relieved by belching. In a few hours it will probably develop into a steady burning pain in the stomach and colicky pains in the upper bowels. As a rule, if the bowels move spontaneously these first symptoms pass away for a time. In from fifteen to eighteen hours, there will be severe pain and burning in the whole region, accompanied by nausea and vomiting and often diarrhea, the vomited matter generally being alkaline or neutral. Diarrheal dejections are frequent and are likewise apt to be alkaline.

Physical examination.—Palpation shows distension and gurgling of the upper abdominal region and great sensitiveness to pressure, and decided local heat.

Temperature.—Temperature is rarely 103° F., generally 102° F., rarely showing much diurnal variation, and its decline is rapid and steady.

Diagnosis.—As a rule diagnosis is easy. The differentiation from typhoid is not difficult, as the temperature in simple acute gastro-enteritis is at its maximum in almost as many hours as it takes typhoid days to develop, and it has none of its other clinical features. From simple acute gastritis it is more difficult to distinguish, but there is one symptom of gastro-enteritis that is wanting in simple acute gastritis; there are no colicky pains in the upper abdomen. While I have seen the temperature of simple acute gastritis as high as 105°, I have seldom met a case of gastro-enteritis much above 103°, and it seems less liable to become chronic.

Clinical aspects.—I will recite two cases to illustrate the clinical character of the ordinary cases that require treatment and management at our hands. As a rule I believe the management of a case of more importance than the mere treatment.

A few weeks ago a Mexican came to me and said that his six year old boy was not very well, and wished me to see him. I learned at this time that the boy had visited his grandfather the day before and had eaten freely of green grapes.

My first visit was at 9 A. M. and I found him apathetic, tongue thick and furred, pulse 120 per minute, temperature 103°, respiration 18; abdomen distended and soft, hot to touch. He made no complaint on firm pressure.

* Read before the Santa Barbara County Society.

His mother reported his bowels had moved about a dozen times during the night and morning. I gave him calomel and soda and ordered that his abdomen be hot packed and the rest of his body be cold sponged every two hours. I saw him again at 5 P. M. and found his condition about the same. I continued the calomel and soda and gave directions to continue the cold sponging and hot pack. The following morning his temperature was still 103° but otherwise he seemed better, his pulse being 100. His mother at this time was very anxious to know what he was to eat. I told her to give him nothing till I should give her orders to feed him, and warned her that if she starved the boy now he would live, and if she fed him, he would die. At 5 P. M. he was slightly better, but his temperature was still 103° . I now learned that his mother had kept the hot pack to his abdomen, but that she had been giving him warm sponge baths every two hours instead of cold because she "was afraid to drive the fever in on him." After a forcible talk, the mother consented to carry out the bathing as directed, and next morning the temperature was 102° , and the following evening 101° , and from that time on the convalescence was continuous and rapid, the patient being discharged on the eleventh day. The only medicine other than calomel and soda was equal parts of pepsin and bismuth subnitrate. The strict fast of the first three days was the most important element in the management of the case.

The second case that I shall report is that of a soldier of the Thirtieth infantry, who, being anxious to part as quickly as possible with the wealth he had inherited from his Uncle Sam, had liberally indulged in tuba and other oriental and tropical curiosities in the way of food and drink. The next morning at sick call he presented himself at the hospital, acknowledging that he had partaken freely of tuba. He had been vomiting almost constantly for three hours. His bowels had moved some five or six times and he had great pain in the abdomen. His temperature was 104° and his pulse 110. He was given calomel and soda and was to have nothing in the way of food until ordered, which proved to be sixty hours. That evening his temperature was 103° and the next morning 102° , and the vomiting was under control, and everything looked like plain sailing. On the evening of the third day he was allowed a small quantity of malted milk and apollinaris and it was continued on the fourth day, the temperature gradually abating till on the evening of the fourth day it reached 100° . On the morning of the fifth day the acting steward met me with the information that when he went through the ward shortly after six o'clock the nurse had reported this man's temperature as being 99.6° and he was bright and cheerful. At half past seven when he went through the ward just before sick call, he found the man vomiting and complaining of severe pain in the stomach and his temperature was 103° . He was again given calomel and soda and the milk and apollinaris discontinued. The vomiting proved so severe that oxalate of cerium was given but without effect. For the next four days the temperature varied from 103° to 105° . There was pain and slight distension over the stomach, and over the bowels shifting colicky pains. Diarrheal discharges were frequent, containing much mucus but with no tenesmus, and very slight odor. About noon of the ninth day the temperature dropped to 102° and did not rise again. His pulse, which had been from 110 to 118, rose to 125. A clear case of collapse from exhaustion. Hot packs had been constantly applied to the abdomen and cold baths to the rest of the body from the recrudescence of the trouble. The heat and moisture had controlled the pain in the stomach and bowels. Bismuth and pepsin was the only thing that had any effect on the vomiting, and it was only partially successful. The patient died during the fore part of the night of the tenth day, worn out apparently by the almost constant uncontrollable vomiting.

I have reported these two cases simply to illustrate how cases will vary where the initial cause is well known. In obscure cases, or where there are complications, we may expect trouble at any time, but in plain uncomplicated cases a fatal termination is very rare. But in these cases a slight indiscretion unknown to the attending physician will make all the difference in the result.

Treatment.—In the way of treatment I know of nothing new to offer or suggest. It has been a rule with me to begin with a purge of calomel and soda. Then for the next two or three days to keep the patient fasting. The hot pack on the abdomen will in nearly every case give relief from the pain and often helps to control the vomiting. Sometimes, however, a cold pack will give more comfort and relief than the hot one. Whenever the temperature gets near 103° , as in other inflammatory troubles, I give a cold sponge bath and repeat it as often as is neces-

sary to keep the temperature down. Internally, I get more benefit from bismuth and pepsin than anything else. I give it in equal parts and do not give the doses close together, believing that the stomach should not be teased by medicines or food at short intervals. As for food, I only give milk and aerated water of some kind, and then only after all vomiting has subsided. Beef tea and broths and soups all seem to do more harm than good. Tea, either hot or cold, I have found injurious on account of the tannin. Cracked ice, if you are sure it is made of distilled water, in cases where the cold pack gives more relief than the hot, will be found to be grateful to the stomach, and sometimes seems to do good. Small quantities of carbonated water at short intervals may be given. Hot milk has been a failure in my hands, though I have tested it faithfully. As a rule the pain is not severe enough to require a hypodermic of morphia; morphia does more harm than good, and in the majority of cases the hot pack controls the pain just as well. Often in the early stages a mild mustard plaster will apparently abort a case, and nearly always gives great relief. After the case has been fully developed it does no good and is a discomfort to the patient.

Geographical distribution.—From my personal observation I am led to believe that it is slightly more prevalent in the southern part of this country and in the tropics, e. g. in Southern Texas and the Philippines, than in the northern part of the country; but southern latitudes seem to make no difference in its severity, differing in this respect from other abdominal troubles.

I think it possible, if not probable, that it is more likely to become chronic in southern and tropical locations than in the north and in that way leave its victims dyspeptic invalids.

THE COMPLICATIONS AND SEQUELÆ OF MEASLES.*

By J. MAYER, M. D., Oakland.

BELIEVE it is usual for a chairman, as a preliminary, to say something regarding the status of the work in which his section is particularly interested and especially with reference to what has been accomplished during the preceding year. Since our last meeting I do not remember that any particular feature of our work has assumed special prominence. Perhaps the things which have recently claimed most of our attention are the control of the exanthemata and infant feeding—the latter including our milk supply.

Although smallpox and diphtheria have been placed somewhat under scientific control, the remaining exanthemata, with mal-nutrition, are, with the one exception of abortion, responsible directly or indirectly for the greatest destruction to human life in what might properly be called its incipency. Our investigators are giving special attention to these subjects, and their work for the past year has been in keeping with general medical progress. The question of a specific for the prevention and cure of the remaining exanthemata is undergoing investigation, and we hope is in a fair way for solution in the near future. But while the medical world awaits the outcome it is for us to make the best use we can of the means at our disposal in the management of those diseases which we have not yet learned how to prevent.

To take the place of an extended commentary on the present status of pediatrics I have chosen to present a short paper on the complications and sequelæ of measles, with a few suggestions relative to their prevention. It is, unfortunately, true that there is little to be said on this subject which is new, and I

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

shall, therefore, be able to do little more than refresh your memories.

Measles, as we usually see it, is a disease attended with discomfort rather than danger, and requires little more than judicious nursing. It is dangerous only in its complications; however, it is doubtful whether there is in the human body a single tissue which is exempt from the possibility of modification, temporarily or permanently, as a result of an attack of this disease. It is not the intention to in any way try to exaggerate or to attach undue importance to insignificant conditions, but to express my belief that ordinarily measles does not get the consideration which its importance demands. And medical men are beginning to find this out.

It is hard to combat the old notion that measles is something akin to a common cold with a rash, and that there is nothing to be done but keep the patient warm. It is also difficult, as you know, to have people accept a new medical idea, which is not to be wondered at. The truth is that we, ourselves, too often encourage indifference by some such remark as "It is only measles."

Gentlemen, experience has taught me that every case of measles should be looked upon by a physician as involving not only the question of the future usefulness and well-being of the subject, but even that of his life.

The complications and sequelæ of measles, immediate and remote, are so many and varied that I shall only have time here to deal with the most common and dangerous ones.

On account of the catarrhal accompaniments of this disease and the favorable conditions thereby afforded for the development of the various micro-organisms, the mucous membranes, and particularly of the respiratory tract, are most apt to suffer. The most frequent, as well as the most dangerous complication, is broncho-pneumonia. It occurs, perhaps, in from five per cent of cases under favorable conditions, to twenty per cent, or even more, in severe epidemics. It is more liable to prevail in institutions where children are crowded together. Of all the complications of measles, this is the one which furnishes the highest death-rate. Broncho-pneumonia is generally a secondary infection—always so in fatal cases. It usually starts up during the eruptive stage, but may come on at any time. The indifference of parents and the carelessness of nurses are responsible for many cases of broncho-pneumonia occurring during convalescence. It is not always due to neglect, however. A certain percentage of the cases are bound to go wrong in spite of all precaution, for in many children there are latent conditions which need only an exciting cause to light them into activity, and this stimulus is furnished by an attack of measles.

It is not always easy to mark the point at which the usual bronchial catarrh merges into pneumonia, but the absence of general improvement at the time it is to be expected should put the physician on his guard. The condition is generally indicated by the usual manifestations; but not infrequently it is present in the almost total absence of abnormal physical signs. If the temperature does not fall with the full development of the eruption, or, when after subsiding, it rises again without evidence of throat, ear or gland involvement, broncho-pneumonia is to be suspected. Furthermore, if, in addition to the high temperature, the patient shows marked dyspnea, rapid pulse, painful cough and general distress, the condition hardly admits any other interpretation.

The broncho-pneumonia of measles does not seem to differ in any marked way from that of an ordinary case, with the exception of the greater liability to exhaustion from the multiple intoxication; and also in

the tendency of all measles complications to assume the chronic form.

Lobar pneumonia may simply be referred to as one of the occasional complications. But some authorities are inclined to the opinion that the specific poison of measles produces a special form which tends to tuberculosis.

Another of the dangerous and rather common complications is laryngitis, which may be of various types and degrees of severity. This complication, according to Holt, furnishes, next to pneumonia, our greatest percentage of deaths. The simplest form is but an aggravation of the usual catarrh accompanying measles. However, it occasionally assumes a spasmodic element dangerous to very young children. More dangerous still is the membranous form. Experience has shown that, as a general rule, when this complication appears early in the disease, it is caused by streptococci; but later on it is more probably true diphtheria. In aggravated cases of this type, the chances are always against recovery. Fortunately, it is not very common in private practice. When this condition has progressed so far as to demand surgical interference, and after a judicious use of the serums, very little is to be hoped for.

Otitis media, with all its possible concomitants, is, perhaps, the next complication, in point of frequency, with which we are confronted, and is the one which, of all others, probably entails the greatest amount of suffering. It is secondary to pharyngitis, and generally comes on late. Earache is more or less common in the eruptive stage, but it is often temporary and subsides with the eruption. When, however, secondary infection occurs through the eustachian tube we have, not only an obstinate, but a dangerous condition to deal with. I am reminded of a patient of mine, a boy of fourteen or fifteen years, who presented one of perhaps a dozen cases of measles which I have lately had occasion to attend at an educational institution in Oakland. There was nothing unusual in the case till about the twelfth day, when, without any warning, and even while still in bed in a warm room, he was attacked with otitis media. The fever and pain increased rapidly—the former reaching 106° on the second day. He was removed to the Waldeck Hospital, in San Francisco, where the mastoid cells were twice operated upon. I believe he has just left the hospital, after a slow recovery. Another of the twelve developed broncho-pneumonia without any apparent cause beyond that of having had the measles. I need not recount to you the evil possibilities of an attack of otitis media. Not only is the impairment of hearing probable but the chances of living through it are sometimes exceedingly slim.

The gastro-intestinal tract is also subject to various derangements and should receive close attention. These disturbances may range anywhere from catarrhal diarrhea to membranous colitis, ulceration, hemorrhage, etc., with their attendant consequences. They arise from a combination of two causes: first, indiscretions in feeding; and second, excessive secretion in the elimination of toxins. As a rule, the younger the patient the more liability to digestive disturbance.

A mild conjunctivitis may be said to be almost a part of measles, but now and again, particularly in strumous children, the deeper eye structures, especially the cornea, may be the seat of destructive changes.

The condition of the mouth, tonsils and pharynx, as well as of the upper air passages, during an attack of measles demands, and should receive, the closest attention. If, in the absence of proper care, or in spite of it, abrasions of the mucous surfaces occur, absorption of septic material and consequent poison-

ing of the glands and deeper tissues, with all that it implies, is not only possible but extremely probable.

A complication which occurs often enough to be noted here is suppression or delay of the eruption, and when it arises, from whatever cause, it should give us no little concern. The causes which bring this about are exposure to cold and over-feeding with consequent excessive vomiting, in the prodromal stage. It may be a combination of both. Another cause is general low vitality—a lack of sufficient systemic energy to get up a reaction. For days the little patient may not be able to retain a particle of nourishment. The temperature will drop below the normal, the virus of the disease seems for the time to have overwhelmed the vital powers, and a state of coma, with general tendency to collapse, supervenes. This condition calls for prompt measures. Warm and stimulating applications to the surface, rectal feeding, with rectal and hypodermatic stimulation, should be resorted to for the purpose of sustaining the patient and bringing about a reaction. The heart action in these cases is usually very slow as a result of the poisoning of the nerve centers, and it requires close watching till the eruption is established.

There is not much tendency to involvement of the nervous system. Convulsions from hyperpyrexia in the early stages are occasionally seen in younger children. When they arise later on they are in this, as in other diseases, of much concern, depending usually on some dangerous complication. Mental derangements occur now and again, but are generally evanescent; much depends upon individual temperament.

The foregoing are the common complications for which, in every case of measles, we should be on the lookout. The occasional complications, however, must not be overlooked. I shall mention here only a few of them: Meningitis, nephritis, myo-, endo- and pericarditis, pleuritis, vulvitis and acute synovitis. In parturient women, or in those aborting, the existence of measles predisposes to septic infection.

The relation of measles to other diseases has long been a matter of speculation by the medical profession. It has been noticed that measles is exceedingly liable to be followed by other diseases. Particularly is this so with whooping cough and tuberculosis. Is measles the predisposing cause of other diseases, or is it merely the agency by which a latent infection is aroused to fresh activity? Is whooping cough a separate entity, or only a manifestation of nervous instability or irritation arising from some unknown source? One would expect that its apparent contagiousness ought to have a bearing on the settlement of this point. If the first theory be correct, measles certainly furnishes an opportunity for the easy introduction of whooping cough, as well as of tuberculosis, by the breaking down of the normal systemic defenses. Tuberculosis is the most common of the sequelæ of measles, and particularly the pulmonary variety. Tubercular involvement of the glandular system, and also of the joints, will be found as sequelæ of measles, according to the varying degrees of susceptibility.

A few days ago I was rather unexpectedly confronted with the question of how far secondary infection by measles may aggravate other diseases or systematic tendencies. Ten days after the apparent termination of an attack of measles the subject, a railroad man, left the S. P. Hospital in San Francisco and went to his home in Oakland. That night he died suddenly. Through the courtesy of Dr. Milton I was present at the autopsy, which revealed a state of things somewhat interesting. The postmortem lividity seemed to me somewhat exaggerated. The blood vessels of the brain and meninges were considerably in-

jected. The same condition obtained generally through the abdominal viscera. There was quite a degree of opacity of the arachnoid membrane, and also of the sub-arachnoid fluid, but no increase in the quantity of the latter. There were extensive adhesions of the right pleura which, however, did not seem to be of recent causation. The heart was sent to the laboratory of the Oakland College of Medicine, and the following is a summary of the findings: "Heart soft, flabby and heavier than normal, left ventricular wall thickened. Endocardium the seat of extensive inflammation, as well as the muscle wall. Inflamed circumscribed areas varying from the size of the thumb-nail to that of a twenty-five cent piece, found in both auricles. Endocardium generally cloudy. The tricuspid and mitral valves are extensively inflamed, especially the left, which is indurated to a semi-cartilaginous consistency. On both surfaces of the mitral valve recent ulcerations contain numerous staphylococci and pus cells. A plastic adherent exudate is apparent throughout the muscular bands of the left ventricle. The chorda tendinæ are thickened and some of them seem semi-fibrous. Sections of tissue from the heart wall show extensive infiltration of small, round cells and microorganisms in the neighborhood of small blood vessels, and also scattered through the tissues. Diagnosis—Ulcerative endocarditis and myocarditis."

The record of the case at the hospital revealed the fact that three years previously this man had a venereal sore. Now, what caused the endocarditis? Was it measles, or was it syphilis aroused into fresh activity by the presence of measles? If measles can infuse new life into latent tuberculosis and other diseases, why not into syphilis? In any case it hardly admits of a doubt that measles figured prominently in this man's trouble.

The sequelæ of measles affecting the skin are from their frequency and relative obstinacy, particularly in subjects constitutionally handicapped, entitled to special consideration. Corlett says: "From the wide spread vascular disturbance of the skin, and consequent disruptive condition of the cuticle, extraneous pathogenic organisms readily gain access to the underlying structures." This probably explains why cutaneous diseases are so frequent after an attack of measles. Eczema furunculosis, abscesses and even lupus may originate in this way. Some of the occasional, but none the less important sequelæ are, Blepharitis, corneal ulcers or scars, granular lids, chronic conjunctivitis, otorrhea, chronic nasal catarrh, chronic gastro-intestinal catarrh, chronic nephritis, chronic synovitis and periosyitis, deaf-mutism, chorea, epilepsy and various other forms of nerve derangement.

In measles, as in obstetrics, the great majority of cases will, with ordinary attention, take care of themselves. In the one condition, however, as in the other, there is a considerable percentage of cases which require the careful watchfulness of the trained physician to prevent complications, or to cope with them as they arise. The precautions to be adopted for the prevention of complication in measles are, in the light of our present knowledge, nothing more than what common prudence should dictate.

When a child is taken sick, the first thing to do is to surround it by proper hygienic conditions. It should be put to bed in a warm, well ventilated room, and a competent nurse put in charge. The room should be shaded, not darkened, for darkness is not generally conducive to well-being in sickness any more than in health. The kind and amount of food should be properly regulated, and should be entirely liquid till the patient is convalescent. The patient should have access to plenty of good drinking water to quench the thirst and to aid in systemic irrigation. The many discomforts must be met as they arise.

The air of the room ought to be kept moderately saturated with moisture. As a general thing rooms are kept too warm; 70 degrees is about right. Too much bed clothing depresses the patient, and also tends to unduly irritate the skin. Should the temperature of the patient be inclined to run unusually high, small doses of antipyretics may be given. The coal tar preparations, in moderate doses are not contra-indicated. Periodical sponging with tepid water should be resorted to; this lowers the temperature, accelerates the development of the rash, thus contributing to the elimination of poisons by the skin. Should the eruption be slow in developing, and particularly where there is a tendency to depression, with attendant general discomfort, I have found excellent results from a combination of liquor acetate of ammonia and syrup of Dover's powder. The mouth, and particularly the sulci between the gums and cheeks, should be kept clean. The pharynx and tonsils should be kept aseptic, and the upper air passages kept clean and open by the use of antiseptic washes and the atomizer. If the hearing becomes affected by the occlusion of the Eustachian tube with absorption of the air from the middle ear, careful inflation should be resorted to. Earache calls for the external application of warmth, and perhaps the insertion in the external ear of a few drops of heated glycerine carrying in solution morphin, atrophin, and cocaine, as recommended by Thomas. The eyes should be kept clean by some antiseptic solution such as boric acid. Any unusual involvement of the skin needs prompt attention. Should digestive disturbances arise, laxatives, astringents or antiseptics may be called for. In giving laxatives care must be taken that the alimentary tract be not unduly irritated. Excessive nerve irritation may call for sedatives. The length of time which a patient should be kept indoors will vary with conditions. Ordinarily twelve to twenty days.

In conclusion, perhaps I cannot do better than quote, with due acknowledgement to the "Twentieth Century Practice of Medicine," some extracts from a pamphlet which, during an epidemic of measles in Glasgow, was distributed to the people by the health authorities:

Measles is a dangerous disease—one of the most dangerous with which a child under five years of age can be attacked. It is especially apt to be fatal to teething children. It tends to kill by producing inflammation of the lungs. It prepares the way for consumption. It tends to maim by producing inflammations of the ears and eyes. Measles has carried off more than four times as many persons as enteric fever. It is therefore a great mistake to look upon measles as a trifling disease. Every child ill with measles ought at once to be put to bed and kept warm, for the mildest cases may be made serious by a chill. Measles is for this reason most dangerous in winter and spring. The older a child is, the less likely it is to catch measles, and if it does, the less likely it is to die. If every child could be protected from measles until it had passed its fifth year the mortality from this disease would be enormously decreased. It is therefore a great mistake because as a rule children sooner or later have measles to say, "The sooner the better," and to take no measures to protect them, or even deliberately to expose them to infection.

DISCUSSION.

Dr. Kaspar Pischel, San Francisco.—Besides hygienic precautions (care in blowing the nose), I would suggest that the physician inspect the drum membrane every day, just as he inspects other parts of the body. If otitis media sets in, an early paracentesis will relieve the severe pain of the patient, and will cut short the danger of the infection extending to the mastoid. An early incision will prevent the breaking down of the membrane, which is so often accompanied by permanent deafness.

[For further discussion see JOURNAL, May, page 160.]

THE MEDICO-LEGAL RESPONSIBILITIES OF THE PHYSICIAN IN CASES WHERE INSANITY IS ALLEGED AS A DEFENSE.*

By J. W. ROBERTSON, M. D., Livermore.

WHILE the law provides that all citizens owe to the State certain public duties, yet, because of the exacting nature of our profession, we have been relieved of many of the burdens of citizenship. On the other hand, there has been placed upon us other responsibilities which are ill understood and which are often carried out with personal discredit, and injury to our professional standing.

In this paper I desire to set out, fully as I may, not the moral maxims that should guide us, for honest intentions and truthful declarations are presupposed, but certain legal fictions and cumbrous judicial procedures which entangle us in a mesh of false testimony; compelling us to misstate medical facts in order to comply with the rules of evidence.

In criminal cases there are no privileged communications and the physician, if called, must testify to all facts within his knowledge. But he can be, and usually is, called in another capacity; not to testify to specific facts, but to a theory which has for its foundation his medical knowledge. It thus happens that no matter what the case be, no matter how definitely the facts be established, physicians, standing equally well, can be found who will champion both sides and will go on the witness stand and swear to diametrically opposite opinions. So notorious has this abuse of medical testimony become that juries have been warned as to its credibility; and, from the bench, judges have declared that, as testimony, it must be regarded as a partisan statement. Yet, outside the court-room the opinion of these same gentlemen is sought on matters both medical and moral, their social standing is excellent and their reputation, as honorable men, is untarnished. It certainly is not true that their testimony can be bought and sold as so much merchandise. By what necromancy, then, is this change wrought? What power has transmuted their precious gold into this worthless dross? The explanation is not difficult. It simply means that medical facts have been taken out of the narrow limits and familiar surroundings, and have been so distorted as to fit in legal moulds, hundreds of years old.

In law nothing is good that is not old, and, until precedents have fossilized an idea and incrustated it with hundreds of decisions, it does not become a legal maxim. Medicine and law are incompatible and are types of the extremest radicalism and conservatism. In the past hundred years no science has made greater progress than medicine, while law remains a question of precedents and procedures. Imagine a modern surgeon following the treatise of John Vigo on gunshot wounds, or quoting Sydenham as to therapeutic procedures; or imagine a modern judge setting up some rule of evidence in opposition to Blackstone. He would be regarded with supremest contempt and his judgment would only excite ridicule.

In no department of medicine has greater progress been made than in the study and treatment of ailments based on a diseased brain. Not a hundred years ago the connection between the brain and the mind was absolutely denied and Spurzheim, when he asserted their close connection and proved it by arguments which are now so well established as to seem self-evident, had to brave a storm of abuse and ridicule. At the present time our laws, which judicially interpret medical facts, are based on ideas so

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erroneous, from the physician's point of view, that no possible compromise can result.

When a doctor is taken from a sick room, where his whole training and mental habit has made him dominant, and is pilloried on the witness stand, he is by no means changed from a Jekyll to a Hyde. It is true that he is strangely environed, yet his knowledge of the subject discussed is a medical knowledge, and should be far greater than that of the inquisitor which is always superficial, often crammed for the occasion, and but rarely so digested that he can question intelligently. Unfortunately the law allows him to conceal the real facts at issue and in their place to frame a hypothetical question based, not on the whole testimony, but on such a statement of facts as he may desire to establish. In this way the lawyers for each side prepare a hypothetical question so framed as to represent entirely opposing views, and it is not a difficult matter to get any number of physicians to go on the stand. Each honestly answers the questions as framed, yet, by the cunning of the framers, they seem to be swearing to diametrically opposite statements. The true test of the value of medical expert work would be to put the same hypothetical question to all witnesses; let it be framed by the judge so as to cover all the facts he believes to be essential and, above all, let the experts be summoned by the court. Necessarily the answers would be of value if the foundation rests on real knowledge, and it is certain that the opinions would not vary more than in other medical consultations.

Unfortunately, Blackstone does not mention this method of obtaining evidence; and, if any judge should be so rash as to adopt this suggestion, our Supreme Court would invalidate it as not a legal procedure. It is not denied that physicians are often partisan and, in their answers are liable to lean to that side which employs them; but this is a personal equation difficult to eliminate and is certainly accentuated by our cumbrous legal methods.

As it now stands, we cannot listen to the testimony, go upon the witness stand, reject what we believe to be false and base our testimony upon the evidence that to us seem properly adduced. It is for juries to decide as to the credibility of the testimony. We must base our judgment on numberless ill-assorted and impossible statements, possibly contradictory in themselves, certainly not giving a typical description of any mental case with which our study or observation has familiarized us. In a case recently tried the astute lawyer for the defense borrowed a work on insanity from his family physician and carefully studied the subject. He found that sunstroke, injuries to the head, heredity, jealousy, epilepsy and organic brain diseases produced insanity. He further found that insanity was characterized by suicidal mania, homicidal mania, periods of unconsciousness, with epileptic seizures, delusions of persecution, headaches, reasoning mania, violent outbursts of passion, loss of memory and kleptomania; and that, as a result, we had dementia, paranoia, acute mania, chronic melancholia and general paresis. He did not hesitate to establish by at least 20 witnesses, members of the defendant's family, employees, and friends, that these conditions all existed, each witness supplying one to half a dozen links in the chain he so skillfully forged—not realizing the impossibility of so many diverse conditions being present in one individual who, before the murder, had been regarded by the community in which he lived as mentally normal. He not only proved that all these conditions were present, but had the usual number of experts who swore that, if all these conditions were present as testified to, the man was certainly insane—a state-

ment the truth of which even the expert for the prosecution was compelled to admit.

As a matter of fact, the plea of insanity, so frequently urged as a defense for murder is, as a rule, a legal subterfuge, and most frequently it is an open secret with judges, jury and attorneys, as well as with the public at large, that, behind this plea, lay revenge for a real wrong which morally, if not legally, justified the taking of human life. After such a murder has been committed, lawyers skilled in the selection of a jury are employed and the farce of a defense begins. Though the defendant may have lived in the community for many years without his mental condition having been either openly questioned or a suspicion of it arising amongst his most intimate acquaintances, the moment the trial begins it is found that some prehistoric ancestor was afflicted with some condition resembling mental alienation. Possibly that the defendant himself had been peculiar; that he sometimes had headaches; that he was obstinate and occasionally had outbreaks of anger; and that, at one time, he had a severe spell of illness and had showed, possibly, undue jealousy; yet the underlying testimony was constantly of a great wrong done him, which the law could not reach or punish. On this showing medical experts are summoned who testify that, under certain circumstances, certain physical conditions with the symptoms enumerated, might lead to insanity; not that it did or that the defendant was insane. Others by equally skillfully worded contentions, deny this possibility; and so the fight of medical experts rages, which finally induces the jury to believe that at least such a thing as insanity does exist—in the abstract if not in the concrete. While there may be a doubt of the defendant's being absolutely normal, there is no doubt but that he did exactly what most men would have done under the same circumstances, and, not because of insanity and the unreasonableness of the act, but because of its very rationality, a verdict of not guilty is rendered; the insanity plea being merely a subterfuge by which the verdict can be legally justified.

On the other hand many homicides have been committed where insanity could have properly been alleged. They are usually characterized either by frenzy and purposeless homicidal passion, or they are cool and deliberately planned and have, as a basis, either morbid ideas or absolute delusions. In fact, the more brutal, purposeless and unjustifiable a murder seems, the more probable is it that it is the act of a homicidal maniac. But the law says that, because we cannot always be certain of the hidden motives that actuate us, we cannot base any conclusion on the apparent lack of motive. The father who deliberately shot his daughter to death, absolutely without reason or motive, did not even plead present insanity; he did insist that his death sentence be commuted to life imprisonment because he was of weak intellect. This plea was refused by the Supreme Court and the sentence of death was confirmed. It would have fared badly with Abraham had he carried out his intended sacrifice of Isaac, and his case had been appealed to our Supreme Court; the only satisfaction being that the first plea of insanity and the first ruling would have been contemporaneous; the medical view changing but the legal ruling having been only more confirmed by the lapse of ages.

The California Reports are stained with judicial murders because of the refusal of the courts to recognize insanity as a mental disease. It is gravely asserted that there is such a thing as partial insanity—in other words, that a person can be insane on one or even upon a dozen subjects, and still, because he can reason, remember and know certain facts as they

really exist, that this man should be held responsible for his acts. The law says that a man need not possess a sound mind in order to render him liable to punishment. "The defendant might be of unsound mind upon every other subject except the one that instigated the murder, the defendant might have been acting under a delusion at the time of the homicide, that the deceased intended to steal from him, and for this reason, not of sound mind, and still the law holds him guilty of murder." The test of criminal responsibility was established many years ago when Tyndall, Chief Justice of England, in answers to questions proposed by the House of Lords to the judges as to what constituted responsibility, gave the following answer: "To establish a defense on the ground of insanity, it must be clearly proved that, at the time of committing the act, the party accused was laboring under such a defect of reason, from disorder of the mind, as not to know the nature and quality of the act, or, if he did know it, not to know that he was doing what was wrong." This test of right and wrong is one of the most absurd medical propositions conceivable, yet it is good law. Because our English ancestors, totally misunderstanding the nature and symptoms of insanity, formulated it, our own law courts accept it as a legal maxim.

If insane patients had no knowledge of right and wrong, if they did not govern themselves according to our rules, and did not regulate their lives in accordance with our laws, our asylums would be Bedlams in place of orderly and well conducted hospitals. Of our 6,000 insane, at least 5,000 do know that they must conduct themselves properly, and that a breach of certain rules will entail loss of certain privileges and, by this knowledge, our asylums are governed; all who are not absolutely imbecile have some glimmering knowledge of proper conduct.

One judge did go so far as to declare that "total loss of understanding is evidence of an imbecile rather than an insane mind. Fatuity is one thing; insanity another."

I can find no other decision upholding so heterodox a view of this well established maxim. Though the cunning of the insane is proverbial, though the records of our asylums teem with cases illustrating forethought and systematic conduct of life, and though many of our most dangerous and undoubted lunatics can converse rationally on many subjects and, to the casual observer show no active insanity, yet the law tenaciously holds to the "mad dog" theory of insanity and denies its right to be placed as a defense, except in those cases of raving madness where all consciousness is lost—a thing which rarely occurs even amongst the most violently insane.

If the law would broaden this definition to that of thorough comprehension as distinguished from a theoretical knowledge, it would still be too narrow. As there is no definition of insanity possible, nor even any description of it so broad as to include every class, so there can be no test applicable to all cases; certainly not the test of the knowledge of right and wrong. If any test can be applied it would be one of loss of will power, which all medical authorities agree in claiming, yet which the law denies. Certainly of all legal propositions the claim of partial insanity has led to the most flagrant legal abuses. In a case recently tried it was shown that a man gradually developed systematized delusion of persecution and often complained to his friends that he was being persecuted and hounded by certain religious organizations. These delusions he exhibited many times. While working in the fields with other laborers all drank water out of a bucket, the cup having been broken. One man jokingly remarked that the loss

of the cup made no difference as they all belonged to the same great family. This remark was taken up and brooded over by the insane man; and, after warning the other that he had no right to make such a remark that he was no relative and that he knew a conspiracy was on foot, shot and killed him. On trial he was convicted and condemned to be hung, and, on appeal, the verdict was sustained.

Another man, believing that his neighbors were slandering him and were attempting to drive him out of the country and plotting his ruin, lay in ambush and killed the man he believed to be the most important assistant of his enemies. Though these facts were well established, he was convicted. Another case is that of a husband who had gradually developed delusion of persecution and of being poisoned. He claimed that this poison was introduced into his system through food prepared by his wife, and exhibited some eczematous patches as proof. He had taken portions of this food to chemists for examination, and had publicly declared his belief that he was being systematically poisoned. One day he came to dinner accompanied by friends, and all were served with soup by his wife. After tasting his soup he turned to his wife and declared that she was attempting to poison him; got up from the table, secured a pistol and killed her. This lunatic was convicted of murder in the first degree, and, on appeal, the verdict was sustained, as at least being good law. These cases are typical of many which occur in our court records. While insanity was plead in all these cases as a defense, yet in hardly a single case was an issue of present sanity raised.

The courts hold very strongly that no insane person can be tried, and when such a presumption arises during the trial of the case it is the duty of the judge to stop the criminal trial and determine present sanity. In none of the cases quoted, and but rarely in any case, is this done, for the legal mind is bound to accept the medical view of reasoning mania; even in law, the trial should have been one of present sanity and the patient should not have been tried or imprisoned in a penitentiary.

Some years ago a man in a drunken row stage an unoffending friend and was tried for murder. The medical expert, called for the prosecution, after examining into the defendant's mental condition believed that he was then insane and, by his advice, the presiding judge ordered the trial stopped and arranged a jury to investigate his present sanity. When the defendant was a reasoning homicidal maniac was clearly established, and the man was committed to an asylum. The defendant, both at the time of the trial and after being sent to an asylum, loudly protested that he was not insane and because, while under confinement, did show a certain memory and rationality finally succeeded in forcing a new trial; not because he was "medically sane, but because, if he had recovered as to know the difference between right and wrong and could conduct his defense in a rational manner, he is sane for the purpose of being tried though on some other subjects his mind may be deranged."

Owing to the abuse of this plea, to the suspicion under which a resort to it points and the uncertainty of retention in an asylum which our law allows, it is a right not often granted. For the purposes of the law many of its contentions are just, if not medical correct. Moral insanity, temporary intoxication, inability to control one's temper known as "irresistible impulse," and transitory frenzy occurring but once in a lifetime, and then of but a few seconds' duration, are all properly excluded as legal defenses.

While it seems useless to suggest any charges in

the law, yet a few slight modifications would make the medical expert of such real value in arriving at a just conclusion as to warrant some change from the now notoriously base use to which such services are often put. When insanity is plead as a defense for a crime committed, a medical commission should be appointed by the court, full access to the accused be allowed, and as full personal investigation be made as one would do in private consultation. The opinion thus arrived at would be of material value in aiding the proper meting out of justice.

There should be a criminal insane asylum built within one of our State prisons, and if the defendant be found insane he should be incarcerated there for the rest of his life, not for the purpose of punishment, but simply to protect the public against a repetition of the homicidal impulse. While this might seem a hardship where insanity is of but temporary duration, yet in the many cases as set forth in the court reports, I do not find a single one where the insanity was not fixed and permanent, and of such a nature that, under similar strain, they would not again become homicidal. If the experts found the defendant not insane at the time of the commission of the crime, or at the time of investigation, and the presiding judge confirms their opinion, then the plea should be disallowed as an issue for the jury to consider. This would at once eliminate, practically, the baser uses to which the plea has been put and, while not freeing the insane, would fully protect the public. At all events, the hypothetical question should be abolished and physicians be allowed such free and full investigation as they demand in private practice before expressing an opinion.

At present the only safe course a medical expert can honorably follow is to refuse to go on the witness stand unless, after a full investigation, he becomes convinced, not that he can answer the hypothetical question honestly, but that he can fully enter into the merits of the case, and know that his contentions have a basis of absolute truth.

APPENDIX.

1. Test of insanity that the accused at the time of committing the offense knew that it was wrong:
 - People vs. Hobson, 17 Cal. 424.
 - People vs. Coffman, 24 Cal. 230.
 - People vs. McDowell, 47 Cal. 134.
 - People vs. Pico, 62 Cal. 50.
 - People vs. Hoin, 62 Cal. 120.
 - People vs. Cleridium, 91 Cal. 35.
 - Marceau vs. Travelers' Ins. Co., 101 Cal. 338.
2. Intellectual knowledge of right and wrong with loss of will power to act in accordance with such knowledge does not constitute a legal defense:
 - People vs. Hoin, 62 Cal. 120.
 - People vs. Cleridium, 91 Cal. 35.
 - People vs. Travelers' Ins. Co., 101 Cal. 338.
 - Marceau vs. Ward, 105 Cal. 335.
 - People vs. McCarthy, 115 Cal. 255.
 - People vs. Huberthy, 119 Cal. 216.
 - People vs. Barthelman, 120 Cal. 7.
 - People vs. Owens, 123 Cal. 482.
3. Brutal and motiveless crimes not necessarily insane crimes.
 - People vs. Larrabee, 115 Cal. 158.
 - People vs. Smith, 31 Cal. 466.
 - People vs. Enbanks, 86 Cal. 295.
 - People vs. McCarthy, 115 Cal. 255.
4. Suicide not necessarily proof of insanity.
 - People vs. Messersuith, 61 Cal. 246.
 - People vs. Owens, 123 Cal. 482.
5. Moral insanity not a legal defense for crime:
 - People vs. Kerrigan, 73 Cal. 222.
 - People vs. McCarthy, 115 Cal. 255.
6. "Partial" insanity not necessarily a legal defense for crime:
 - People vs. Williams, 43 Cal. 344.
 - People vs. Bell, 49 Cal. 485.
 - People vs. Schmidt, 106 Cal. 48.
 - People vs. Hubert, 119 Cal. 216.
 - In re Buchanan, 129 Cal. 330.
7. Proof of insanity. A person is supposed to be sane until the contrary is proved, and when it is alleged as a

defense for crime it must be shown by preponderance of evidence:

- People vs. Myers, 20 Cal. 518.
 - People vs. McDowell, 47 Cal. 134.
 - People vs. Messersuith, 57 Cal. 575.
 - People vs. Messersuith, 61 Cal. 245.
 - People vs. Hamilton, 62 Cal. 377.
 - People vs. Enbanks, 86 Cal. 295.
 - People vs. Travers, 88 Cal. 233.
 - People vs. McNulty, 93 Cal. 427.
 - People vs. Bremmesly, 98 Cal. 338.
 - Marceau vs. Travelers Ins. Co., 101 Cal. 338.
 - People vs. Ward, 105 Cal. 335.
 - People vs. McCarthy, 115 Cal. 255.
 - People vs. Allender, 117 Cal. 81.
8. Amounting to such proof that a civil jury would find him insane:
 - People vs. Hamilton, 62 Cal. 377.
 - People vs. Messersuith, 61 Cal. 246.
 9. To raise reasonable doubt not sufficient:
 - People vs. Myers, 20 Cal. 518.
 - People vs. Travers, 88 Cal. 233.
 - People vs. Ward, 105 Cal. 335.
 - People vs. Barthelman, 120 Cal. 7.
 10. Not necessary to prove beyond a reasonable doubt:
 - People vs. Coffman, 24 Cal. 230.
 - People vs. Wilson, 49 Cal. 13.
 - People vs. Wreden, 58 Cal. 392.
 - People vs. Hamilton, 62 Cal. 377.
 11. While an insane person cannot be tried for any crime committed, but plea of present insanity must be raised at time of trial and by order of the presiding judge, if he be in doubt as to the present sanity of the accused:
 - People vs. Farrell, 31 Cal. 576.
 - People vs. Ah Ging, 42 Cal. 18.
 - People vs. Pico, 62 Cal. 50.
 - People vs. Lee Fook, 85 Cal. 300.
 - People vs. Schmidt, 106 Cal. 48.
 - People vs. McCarthy, 115 Cal. 255.
 12. "General" insanity as contradistinguished from temporary aberration must be established:
 - People vs. March, 6 Cal. 543.
 - People vs. Francis, 38 Cal. 183.
 - People vs. Travers, 88 Cal. 233.
 - People vs. Lane, 101 Cal. 513.
 - People vs. Schmidt, 106 Cal. 48.
 - People vs. Shattuck, 109 Cal. 673.
 - People vs. McCarthy, 115 Cal. 255.
 13. Evidence as to insanity admissible not only as to the time of the commission of the crime, but for periods both before and subsequent where it tends to show permanent mental alienation:
 - People vs. March, 6 Cal. 543.
 - People vs. Farrell, 31 Cal. 576.
 - People vs. Francis, 38 Cal. 183.
 - People vs. Smith, 57 Cal. 130.
 - People vs. Lee Fook, 85 Cal. 300.
 14. Defense of insanity is often resorted to in cases where overt act is so thoroughly proved that no other means of escaping punishment remains:
 - People vs. Dennis, 39 Cal. 625.
 - People vs. Bamberger, 45 Cal. 650.
 - People vs. Pico, 62 Cal. 50.
 - Marceau vs. Travelers' Ins. Co., 101 Cal. 338.
 - People vs. McCarthy, 115 Cal. 255.
 - People vs. Larrabee, 115 Cal. 158.
 - People vs. Allender, 117 Cal. 81.
 15. Intimate acquaintances may give an expert opinion as to the mental state of an accused person and the degree of intimacy entitling to this opinion is largely left to the discretion of the trial judge:
 - People vs. Pico, 62 Cal. 50.
 - People vs. Firer, 77 Cal. 147.
 - Phelock vs. Godfrey, 100 Cal. 578.
 - People vs. Lane, 101 Cal. 513.
 - People vs. Schmidt, 106 Cal. 48.
 - Estate of Wax, 106 Cal. 343.
 - People vs. McCarthy, 115 Cal. 255.
 - People vs. Hubert, 119 Cal. 216.

DISCUSSION.

Dr. H. G. Brainerd, Los Angeles.—It is a well-known fact that expert medical testimony has become a by-word to the profession and to the public, and they think anything can be obtained if one has money enough. There is a reason for this false testifying, and there are some ways in which it can be overcome. The medical expert is approached by the lawyer and the case is stated as the lawyer sees it. If the opinion given by the physician is unfavorable he is not called in that case. Say that this hypothetical question is the thing upon which he bases his opinion. The questions are usually long and very difficult to follow, and it is very difficult for him to follow a question which is so

new that he cannot recognize it. There is so little between them that you do not recognize them as the same. Your opinion is turned and you are caught whichever way you answer. There are certain things which overcome this in France and England; they have a commission of experts to whom are referred the questions of sanity. None of us should attempt to give an opinion unless we get all the facts.

The experts appointed by the court should have full authority to see the patient, to make personal examination, and opportunity for consultation in the room of the patient. The present legal test is very different from the medical idea of insanity. It is a question as to whether the person who has committed the crime knew the character and quality of his act. A case has been on trial in Los Angeles where the man went into the place where he had been employed and killed everyone in sight. No one could question his insanity. The interesting thing is that the history shows that he has been of unsound mind for years. If he had gone to trial he would have been hung. He had written in a note what distribution to make of his things, and also said that he was going to the shop to put an end to the place which had kept him out of work. Men who are insane on one subject should be isolated and put where they cannot do murder.

Dr. R. F. Rooney, Auburn.—When Dr. Cluness was president of this Society I wrote a paper of this kind, in which I took a good deal the same ground as Dr. Robertson has taken. If that idea was carried out it would do away with a great deal of the necessity of expert evidence. A man who commits a crime in which life is in danger, whether he be acquitted upon the question of insanity or not, should afterwards be put for life in an institution. Because, if he is a criminal and escapes through the plea of insanity, he is not a safe man to be at large. If he did commit that crime through a mental delusion he is not fit to be at large. He is always liable to be insane again. Therefore, if we could have an institution for criminal insane in which every one who has committed a crime and escaped capital punishment could be placed, it would do away with a great many pleas of insanity. Let the person know that no matter what the outcome of the trial on the plea of insanity, he shall forever after be segregated from his fellows.

Dr. J. W. Robertson, Livermore.—I would like to point out the fact that whenever insanity is alleged and does not exist, that the patient is acquitted. Of course the public rather sneer at us in saying anyone is insane. The real statement is that nobody is absolutely normal.

RICKETS AND PROPRIETARY INFANT FOODS.—REPORT OF A CASE.

By LEWIS S. MACE, M. D., San Francisco.

THE CHILD whose case is here reported, an infant six months old, was believed to be in perfect health, except for an attack of constipation, for which advice was sought. He had been fed since birth on a proprietary infant food supposed to consist of ground grain heated to the extent of converting a portion of the starch, mixed with milk, limewater, sugar and cream in proportions which appeared to agree with his digestion.

At first sight the child could have posed for one of the numerous advertisements which are constantly kept before the public eye by the manufacturers of infant foods, who are always so kindly thoughtful for the therapeutic advancement of their customers. His cheeks were fat and rounded, his expression intelligent and active, and his whole body plump and well proportioned. On further examination, however, it

was noticed that the skin was dry and of a dull white color; the plumpness was seen to be due to large deposits of subcutaneous fat, and underneath this the gluteal and calf muscles could be felt flabby and weak and lacking in normal size and tone. The abdomen was prominent, and the epiphyses somewhat enlarged. At the costochondral junction a well-marked rosary could be palpated through thick cushions of fat. The child's head was octagonal in shape, with prominent frontal eminences, and nearly bald, the hair being thin, short and scanty. On questioning the nurse it was learned that his head perspired very freely, especially at night, and that on this account the pillow often had to be changed.

These positive evidences of rickets were observed with much surprise in a child who had every advantage of attention, the best hygienic surroundings and the most scrupulous care. In this case the food only could be at fault, and this was at once examined. Samples taken from the baby's nursing bottle showed a very much diluted milk, containing a little over 1 per cent total proteids, an astonishing amount of starch, and but 1.2-5 per cent of butter fat. Here, then, was the cause of the trouble. The infant food, warranted to produce a fat baby in every instance, had done so in this case, but the very presence of the fat had concealed the real condition of affairs. The child was actually starving for its natural nutriment.

In all probability the result would have been that within a short time some intercurrent affection, accompanied by fever, would have removed this excessive amount of fat produced by the large quantity of carbohydrates in the diet, and then the flabby muscles and knobby bones would have rendered the condition apparent to the most casual observer. Had the investigation not been carried below the superficial testimony of the weight chart and apparent good looks of the child, the disease might easily have been overlooked until more serious results had occurred.

The fact that the use of condensed milk and infant foods which do not make use of natural, raw cow's milk in preparation, are followed in the majority of cases by more or less well-marked signs of malnutrition is too well known to require comment; but the evil effects following the injudicious use of the patented cereal preparations with which the market is flooded receives far too little attention. These articles at best are no better than cereal decoctions properly prepared from oats, barley or other similar grains, although their cost to the consumer is many times greater, and often they are so poorly made and given in such quantities that the intestinal canal of the infant is overloaded with partially cooked starch to the extent of interfering seriously with the assimilation of suitable food, while the rapid accumulation of fat renders it extremely difficult to judge whether the cream and casein are being fed and digested in quantities necessary for the production of healthy blood, bone and muscle.

The evil results of prescribing remedies the formula of which is secret can hardly be overestimated. How much more reprehensible is it for the physician to give a healthy infant a patented food, the constituents of which are unknown and the process of manufacture unexplained, the result of which may be the death or permanent enfeeblement of a normal child. Examination of the food in question showed it to contain about 80 per cent of insoluble carbohydrates—starch—and taking into consideration the fact that the early administration of solid food is a well-known and frequent cause of rickets, and that this food was given the infant when a few days old with marked diminution of the fatty elements, it is not to be wondered at that the result was so serious.

PUBLICATIONS.

International Clinics. Edited by A. O. J. Kelly, A. M., M. D., of Philadelphia, with the aid of collaborators and correspondents. Vol. I, p. 304. Fourteenth Series. Philadelphia: J. B. Lippincott Co., 1904.

This volume opens with an article on "The Chlorid Reduction Treatment of Parenchymatous Nephritis," by F. Widal and A. Javal of Paris. It was found by them that a decrease in the amount of sodium chlorid ingested by a patient suffering from parenchymatous nephritis led to a corresponding decrease in the albuminuria and in the edema. Cattell has embodied the results of many observers in an article on "The Practical Application of Cryoscopy to Medicine," and draws some valuable conclusions. Clark and Luther have made a careful study of the Connell suture of the intestine, and indorse it as the most rapid and most perfect method of suture yet devised for end-to-end or lateral anastomoses. "Observations upon Gastric, Intestinal and Liver Surgery in the German Clinics" is the title of a very readable article by Noble of Philadelphia. He makes a number of critical remarks on the technique of Czerny, Körte and Kehr. The introduction of a series of reviews on the progress of medicine during the year 1903 has greatly enhanced the value of the *International Clinics*. David L. Edsall has charge of the department of medicine, Joseph C. Bloodgood that of surgery, and treatment is dealt with by A. A. Stevens.

The Date Palm; Its Utilization in the Southwest. Mr. Walter T. Swingle of the Department of Agriculture, laboratory of plant life, has prepared a very fine monograph on the subject of the date palm and its particular adaptation to hot, dry and alkaline regions. It is remarkably well illustrated by photographs of the date palms of Algeria, Egypt, etc., and the suggestions relative to the cultivation of dates in our own southwestern states are opportune.

The Journal of Ophthalmology, Otology and Laryngology announces that the ownership of the publication has passed into new hands, but that the editorial management remains the same. "A determined effort is to be made to enlarge the scope of the magazine."

A Simple Phorometer, Adapted for Use at Reading Distance, is the title of a paper by Dr. William A. Martin, San Francisco, recently published in the *Ophthalmic Record*. The simple little instrument is indeed ingenious, and should make a valuable addition to the armamentarium of the ophthalmologist. It is intended solely for determining the presence of muscle imbalance at the reading distance.

Electricity the Chemistry of Ether; a treatise generalizing a fundamental hypothesis as applied to electricity, etc., by George Adam, M. D., San Francisco: The Whittaker & Ray Co. This book has been received, and will be reviewed in due course.

Genesis of Epilepsy, by Louise G. Robinovitch, M. D., New York. "The primary origin of epilepsy, as brought out in this paper, is alcoholism. In the parent it causes epileptiform attacks, and the descendant of such parents is apt to be epileptic in a vast number of cases."

THE CALIFORNIA STATE JOURNAL OF MEDICINE is the organ of the State Medical Society of California, and publishes the society transactions monthly in journal form. Dr. Philip Mills Jones, San Francisco, is editor. The STATE MEDICAL JOURNAL will be, doubtless, the accepted medical journal for general medicine and the dissemination of medical news and professional unity.—*Woman's Medical Journal*.

PERSONAL.

Dr. Charles E. Beebe, formerly of Watsonville, has located in San Francisco.

Dr. J. A. Young, formerly surgeon Pacific Mail Steamship Company, has located at Salinas.

Dr. George W. Peck has removed from Sebastopol, Sonoma county, to Sawtelle, Los Angeles county.

Dr. Thomas M. Williams, formerly of 2692 Pine street, San Francisco, is now located at Palo Alto.

Dr. R. E. Reese has removed from Fort Bragg, Mendocino county, to San Jose, and has opened offices in the Safe Deposit building.

Dr. John Snook has sold his practice at Bakersfield, and, after spending the summer at Tallac, will probably locate at or near Berkeley. The doctor has changed his registration from eclectic to regular.

Dr. Walter Lindley, editor of the *Southern California Practitioner*, has recently been elected Dean of the Medical College of the University of Southern California. This Los Angeles school is now entering its twentieth session. Dr. Lindley was one of the organizers of the school, and is professor of gynecology in that institution.

Lewis S. McMurtry, the next president of the American Medical Association, was born in Central Kentucky, and has always lived in his native State. He comes of Scotch ancestry, and is 52 years of age. He received his preparatory education in Kentucky, and his medical degree from Tulane University of Louisiana. He is a frequent contributor to medical literature, writing mostly on surgical subjects, particularly upon abdominal surgery.

Change of address, San Francisco: Dr. L. W. Spriggs, from 315 Van Ness avenue to 499 Eddy street; Dr. Henry Harris, from 502 to 1023 Sutter street; Dr. Martha G. Thorwick, 1212 Sutter to 1145 Polk street; Dr. A. B. Grosse to 751 Sutter street (erroneously printed Market street last month); Dr. O. F. Westfeld to 391 Sutter street; Dr. Charles Phipps to 520 Ellis street; Dr. H. Herrington to 916 Market street; Dr. S. S. Kahn to 1626 Jackson street; Dr. C. H. Mills to 944 Post street; Dr. A. L. Draper to 360 Geary street; Dr. B. F. Fleming to 1720 Fillmore street.

TO COUNTY SECRETARIES.

There are some of the secretaries of county societies who seem not to understand the relation existing between the several county organizations and the State Society.

The State Society is simply an organization composed of members of the component societies, and is maintained by a per capita assessment on members of these affiliated county societies. There are some members who will pay dues direct for terms including 1904, but that is an individual matter with them, and they have all been notified of their indebtedness. After this year members will pay no dues direct to the State Society, only paying the county dues, which will cover the per capita assessment to the State Society.

The STATE JOURNAL is the property of the State Society, and consequently is owned jointly by every member of every affiliated county society. This being the case, the secretaries of these county societies, representing their membership, should act as their spokesmen, and send in monthly reports, medical news items of interest to their members, notices of marriages, births and deaths, reports of meetings, changes of location; in fact, should act in the capacity of a sub-editor of the JOURNAL. This work may take some time, and may be thought a hardship by some, but the county secretaries are the ones who keep in touch with their members, and are therefore in a position to get the news.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The Alameda County Medical Association met in its rooms, in the Canning building, Tuesday evening, June 14th, President Dr. J. Maher in the chair.

Two interesting papers were read, one by Dr. Green, on the "Treatment of Typhoid Fever," and the other by Dr. A. T. Piercy, on the subject of "Rheumatism." Both papers brought out considerable discussion on the part of the members present. J. M. S.

Los Angeles County.

The Los Angeles County Medical Association held a regular meeting on Friday evening, May 20, 1904.

Dr. Frank W. Miller read the first paper of the evening on "Earache," in which he said: "Proper attention to all cases of earache would greatly reduce the number of chronic ear diseases, deafness and mastoid lesions, with their complications. A thorough examination should always be made. Furuncles are very painful, and may simulate very closely pain occasioned by trouble behind the drum. Acute catarrhal otitis media and purulent trouble cause most of the most severe ear pains. The only rational treatment of earache, aside from the mild and transient form due to acute congestions, is drainage of the tympanum. Local anesthesia may be produced by the installation of equal parts of menthol, cocaine and carbolic acid, with a few drops of alcohol added to make a syrupy solution. An incision is made through the tympanic membrane, including Shrapnel's membrane, and extending along the posterior wall to the lower pole of the drum. To be efficient, it must be extensive. The posterior canal wall is then incised for half an inch outward, well down to the bone. As to the other forms of treatment for mild congestive cases, local applications of cocaine or heat often prove beneficial. Early paracentesis, properly performed, is a harmless procedure."

The second paper of the evening was read by Dr. H. Bert Ellis, who reported a very interesting case of mastoid trouble in which he operated, and all diseased tissue was removed. The patient left the hospital, came to the office for about twelve days, when she had a chill and vomiting, and remained drowsy during the day, so mastoid cells were opened up. The cellular tissue was cleaned out to the tip. Shortly after the patient complained of considerable sore throat, with neuralgic pains in the right eye and forehead, and chills. Shortly after swelling of the neck and redness near the wound appeared, and the patient went through a regular erysipelatous attack of the head, the wound, however, remaining healthy and not being involved. Streptococic serum was used, but without very much result. The recovery was slow, without important details. For two weeks the patient apparently hovered between life and death.

Dr. Edward A. Ochsner of Chicago then gave a talk on "Septic Infections." In part he said: "Septic infections are, as a rule, very badly treated. Undue influence must not be given to the species of bacteria present. Many other factors are important, namely, the kind, the virulence, the site of infection and the resistance of the patient." He only wished to consider those infections gaining entrance through the skin. The first important thing in treating these cases is absolute rest, not only of the part infected, but also of the entire organism. If the heat center is disturbed, and if the patient moves about, they have pyrexia. The second is, the part should be elevated in order to give a good arterial blood supply. The venous circulation should be favored. The third is the general hygiene of the patient. Elimination is

necessary, and sufficient administration of water. The fourth is local treatment. Incision is not necessary in more than 10 per cent, being in many cases not only superfluous, but dangerous. Leukocytosis occurs immediately on infection, and incision should never be made proximal to the line of demarkation. Another important thing is to treat the case early and vigorously. Boric acid has the power to make the pus organisms much less virulent, but not to restrain their growth, as proved by Roswell Park.

Dr. Ochsner does not think that the streptolytic serum is of much use. The lymphatic glands, unless actually broken down, should never be removed, as they are the barriers of infection, both present and future.

JOS. M. KING, Secretary.

Napa County.

The Napa County Medical Society met on June 14th in Napa, and elected the following officers for the coming year: Dr. D. E. Osborne, president; Dr. T. H. Stice, vice-president; Dr. W. W. Rumsey, treasurer; Dr. J. L. Arbogast, Napa, secretary.

This was the only business transacted, except to grant a transfer card to Dr. W. J. G. Dawson to Sonoma county.

At 10:30 A. M. the society met in conjunction with the California Northern District Medical Society.

J. L. ARBOGAST, Secretary.

Placer County.

The Placer County Medical Society met at Colfax on the evening of June 4th, to accommodate its Nevada county members, as they could more conveniently attend the meeting at that place. There was a good attendance, over two-thirds of the members of the society being present.

Papers were read by the following gentlemen: "Gangrene," with notes of two cases, by Dr. Tickell, Nevada county; "Chorea Insaniens," with notes of case, by Dr. Mardis, Placer county; "Mosquitoes," by Dr. Rooney, Placer county.

The papers were well discussed, and a very enjoyable and educational evening was passed.

R. F. ROONEY, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. Parkinson. The meeting was called to order by the president, Dr. Henderson. Those present were Drs. Baldwin, A. E. Briggs, W. A. Briggs, W. E. Briggs, Cartwright, Cox, Duffey, Foster, Henderson, James, Krull, Parkinson, Poore, Ross, G. C. Simmons, G. L. Simmons, S. E. Simmons, Strader, Twitchell, G. A. White, J. L. White, Wilder, Wright and Wheeler.

Dr. G. L. Simmons, chairman of the committee on resolutions, referring to compilation of the State Register, made his report. The resolutions were adopted by the society, and ordered sent to the publication committee of the State Society.

Dr. W. A. Briggs brought before the society his latest improved obstetrical forceps, and described the advantages of the instrument; also a differential phomendoscope and tuning fork for delimiting areas in percussion.

Dr. Parkinson then read a paper on "Notes and Comments on Things Seen Elsewhere."

The discussion was opened by Dr. W. A. Briggs, and partaken in by many of the members present.

The meeting then adjourned.

J. W. JAMES, Secretary.

San Francisco County.

The regular meeting of the San Francisco County Medical Society was held on the evening of June 14th, with the president, Dr. Rosenstirn, in the chair.

Dr. Harold Brum read a paper on "Cborio-Epithelioma Malignum," which was discussed by Drs. Blumer and Stapler.

Dr. D. A. Stapler, in "Demonstration of Radium," said:

Several months ago I had the honor to speak here about the physical, chemical and medical properties of radium. To-day I limit myself to a short demonstration of radium of 1,000,000 activity, the strongest ever sold here. As the Austrian Government keeps all the pitchblende for the Academy of Science, there will be no more radium sold in the next few years. The great penetrating power of this radium is best shown when, put in this box, wrapped in several layers of lead, it still renders zinkblende phosphorescent. Put on the closed eyelid, you will see a beautiful light caused by the phosphorescence of the humor aqueus. The amount of energy given up by radium you can see when looking into this spintharoscope. The phosphorescent particles of the zinksulfide are constantly thrown apart by the radium. As to the curative effect of radium, I treated six cases of very advanced carcinoma (most of them recurrences after operation). I did not cure one. But radium greatly diminishes pain and prevents decay. One patient with recurrent carcinoma after hysterectomy had a perforation in the bladder; the urine had the aspect of coffee, foul smelling; hemorrhages and excruciating pains were present. After a short treatment the urine became normal, and hemorrhages and pains ceased. The patient left the bed to which she was confined before, and was very comfortable. Months later a metastasis in the liver put an end to her existence.

A paper on the programme, by Dr. A. Schmoll, was withdrawn by the author on account of a question arising as to his recognition by the society pending his registration in California as a practitioner. A motion was passed extending to Dr. Schmoll an invitation to read his paper, entitled "The Patbogenesis and Treatment of Gout," at some date after he shall have received his state certificate.

The second, third and fourth amendments to the constitution and by-laws as proposed at the last meeting by Dr. Philip Mills Jones (see June JOURNAL, page 199), were adopted; action on the first was postponed for one month.

The president announced the deaths of members of the society as follows: Drs. Clinton Cushing, G. L. Fitch and W. S. Hereford. Dr. Cheney was appointed chairman of a committee to prepare a minute on the death of Dr. Cushing; Drs. Farnum and Barbat on the death of Dr. Fitch, and Drs. Williamson and O'Brien on the death of Dr. Hereford.

Dr. F. B. Carpenter read the report of the committee appointed to draft resolutions on the death of Dr. Louis A. Kengla as follows:

Dr. Louis A. Kengla died at the age of 43 years, in this city, March 26, 1904, after an illness of several weeks.

Though a native of Washington, D. C., and a graduate of the University of Georgetown, he had lived and practiced in this city for the past seventeen years.

He was a student from boyhood. In his earlier years he had devoted much time and study to the subject of archaeology; had been granted the Toner medal by the University of Georgetown for a thesis based on original work on these lines, and had been honored by the tender of a chair of responsibility in the Smithsonian Institution.

Preferring the living to the dead, however, he gave his attention to medicine, and you know with what result.

Although Dr. Kengla had been for many years an active member of this society, and had but recently been its presiding officer, yet have we, as individuals or as a society, little or no more claim upon his memory than has the profession at large, for as managing editor of the *Occidental Medical Times* was he best known to us, and in such capacity was he widely and favorably known throughout the State.

His loss will be especially felt in the editorial field, a genius for which work had been developed in him by the natural traits of his character, strongly stimulated by his surroundings and by the circumstances of the times.

As the product of his unselfishness, a *pro bono publico* idea has always dominated his writings.

He had a high sense of professional honor, and placed the plane of ethics far above self.

He was honest in his conviction, and fearless in his expression. He never allowed his pen unjustly to wound the feelings of any man. On the other hand, if wrong must be righted, he never hesitated to so launch his shaft that its penetration was sure and deep.

It has fallen to the lot of few medical men of this State to do more in the way of professional building, upon a firm foundation, than to this man, and he has done it well. He was well abreast of the times, well informed on matters politic, and commented thereon without fear or favor.

There has been taken from among us, ere his work was done, a man lamented, not alone by a sorrowing family, but by sincere friends and professional fellows, one whose high aim is worthy our consideration and our emulation.

His loss, be it known to all, we much deplore.

F. B. CARPENTER,
GEORGE H. EVANS,
PHILIP MILLS JONES,
Committee.

The secretary read the report of the committee on the death of Dr. Thomas B. De Witt as follows:

Dr. Thomas B. De Witt, our fellow-member whose early death we wish to commemorate, was a typical, enthusiastic Western American. He was born in Missouri in 1848; was educated in the public schools of that State; had some difficulties in obtaining his medical education, which he bravely surmounted, and graduated at Rush Medical College in 1872. He located in San Francisco in 1875, and soon built up a good practice by his high medical attainments, affable manners and kind treatment of those in need. He was very popular, as shown by his election as School Director in 1882, after a close contest. He was a deeply interested member of this society for more than twenty years. He was deeply interested in the Presbyterian Church for many years, and literally died in harness, having attended to his practice until a few hours before his death, which resulted from cerebral apoplexy, February 24, 1904. He left a wife and son, to whom we offer our sympathy in the time of their bereavement.

ALFRED W. PERRY, M. D.,
Chairman Committee.

Dr. A. B. Grosse moved that the society, by a rising vote, express its appreciation of the efficiency, fearlessness and energy displayed by Dr. Dudley Tait in his work as president of the Board of Examiners. Carried.

Dr. W. S. Thorne, member of the Board of Examiners, addressed the society on the subject of prosecutions of illegal practitioners, and referred to the injustice of imposing all this work on the board, and more especially on its president. Upon his suggestion that county societies should institute proceedings in these cases, on motion of Dr. J. Henry Barbat the president was instructed to appoint a committee of three to confer with the Board of Examiners, and report back a plan through which the society may act.

Dr. Terry, librarian, announced to the society that an arrangement had been effected with the Society of German Physicians by which its valuable collection of medical books had been installed in the library of this society, and is now available to its members.

W. F. BARBAT, Secretary.

San Joaquin County.

At the meeting of the San Joaquin County Medical Society in May, Dr. A. W. Hoisholt entertained the Society, and read a paper on "Huntingdon Chorea." The doctor presented two patients from the Stockton State Hospital.

Dr. W. W. Fitzgerald entertained the Society May 27th. He read a paper on "Ethyl Chloride as a General Anesthetic." He reported twenty-seven cases, having used the anesthetic in many cases of minor surgery, and even one case of appendectomy.

BARTON J. POWELL, Secretary.

Santa Clara County.

On June 15th the Santa Clara County Medical Society held its regular monthly meeting and annual election of officers at the offices of Dr. M. E. Southworth. The number in attendance on this occasion demonstrated the interest of the members in the affairs of the society under the reorganization plan. The balloting resulted in the election of Dr. J. T. Harris of San Jose, president; Dr. William F. Snow of Palo Alto, first vice-president; Dr. E. F. Holbrook of San Jose, second vice-president; Dr. F. H. Paterson of San Jose, secretary; Dr. H. J. B. Wright of San Jose, treasurer.

The retiring president, Dr. W. T. McNary of San Jose, read a highly interesting and timely paper, with the title "The County Medical Society."

The retiring secretary, Dr. J. L. Asay of San Jose, was tendered a vote of thanks and commendation for the very efficient conduct of his office during his incumbency. Dr. Asay has ever displayed unremitting zeal and fidelity in promoting the usefulness and welfare of the society, and escaped re-election only upon positive declination to again assume the arduous duties of the office.

During the last year the membership has been almost doubled, and the outlook for the ensuing term is very encouraging.

F. H. PATERSON, Secretary.

Sonoma County.

The regular monthly meeting of the Sonoma County Medical Society was held in Eagles' Hall, Santa Rosa, June 9th, Dr. J. W. Jesse presiding.

A committee, consisting of Drs. E. M. Yates, A. B. Herrick and R. M. Bonar, was appointed to draft suitable resolutions on the death of Dr. H. H. Davis of Sonoma.

The fee bill was again taken up and practically completed.

The next meeting of the society will be held at Petaluma on July 14th, and a good attendance is confidently expected.

At the May meeting the following were elected to membership: Drs. G. J. O'Brien, R. B. Duncan and Ruth A. French of Petaluma.

G. W. MALLORY, Secretary.

University of California Alumni Medical Department.

Proceedings of the Alumni Association of the Medical Department of the University of California:

On Monday and Tuesday, May 16th and 17th, being graduation week, the Alumni Association assembled to attend special clinics and scientific exhibitions and demonstrations as follows:

At the San Francisco Children's Hospital a number of patients were operated upon, and clinical demonstrations at bedside were held by Dr. Harry M. Sherman and Dr. S. J. Hunkin.

At St. Luke's Hospital Dr. W. I. Terry performed La Porte's operation for procidentia uteri, and Dr. L. W. Allen performed an operation for artificial anus in a case of carcinoma of rectum.

At the City and County Hospital Dr. T. W. Huntington performed a posterior gastro-enterostomy for gastric ulcer, and a Bassini herniotomy. Dr. G. F. Shiels ligated the common carotid artery for carcinoma of the lower jaw.

At the Medical Department of the University of California Professor Jaques Loeb and Drs. Martin Fischer and J. B. McCullom presented demonstrations on animals of the "action of saline purgatives."

In the anatomical and pathological laboratories demonstrations were given by Dr. A. E. Taylor, Dr. R. O. Moody and Dr. I. Hardesty.

The Toland memorial lecture, by Dr. W. W. Kerr, on "The Relation Between Myocarditis and Disordered Metabolism," occupied an hour on Monday and Tuesday.

The annual alumni banquet was held on the evening of the 17th, at which eighty of the members were present.

DIED.

Dr. Thomas Flint, a California pioneer physician and a man prominent in the upbuilding of the State, died at his home, San Justo ranch, San Benito county, on Sunday, June 19th. Dr. Flint was born in Maine in 1824, graduated from Jefferson Medical College in 1849, and came to California, by way of the isthmus, in 1851. He had been a permanent member of the State Society, and was a charter member of his county society. He held various political offices, representing his county in the State Legislature, served as Supervisor, Court Commissioner, director District Agricultural Society, Trustee State Library, etc. He was high in the councils of the Masonic fraternity, and was master of his lodge for ten years.

Medical Education.—When we remember that fifteen years ago there was no uniform requirement for entrance to medical study, many students being admitted without even a high school education; that no medical college was requiring over three years' study for a degree, and most were graduating their students after a two years' course; that the majority of the states of the Union required no examination for qualification to practice, we see that very much has been accomplished. Further improvements are being made at the present time, but we cannot afford to stop where we are, and this surely will not occur. At the rate of progress made in American medical education during the past decade, we confidently predict that our country will soon as surely lead the world in medicine and surgery as is at present the case in many other fields of thought and action.—*American Medicine*.

Hospital Pullmans.—It is said that the Pullman Company will, as a result of agitation, especially by the United States Public Health and Marine Hospital Service, run hospital cars on certain days of each week on their California routes, and that consumptives and other sick persons must travel in these cars.—*Clinical Review*.

Yellow Fever.—Dr. Edward Souchon, president of the Louisiana State Board of Health, has recently been in Washington in consultation with Surgeon-General Wyman and other noted sanitarians. He does not consider the yellow fever problem settled. The disease has made its appearance in Mexico, and as but a shallow river separates that country from this, Dr. Souchon advocates a good system of land quarantine to act with the excellent marine quarantine already in existence.

Protozoa—Scarlet Fever.—Dr. Mallory has stated in a meeting of the Boston Society of Medical Sciences that he had observed in the skin of four patients dying from scarlet fever protozoon-like bodies. "If scarlet fever be proved to be a protozoon rather than a bacterial infection, we would seem to have more hope of finding some chemical substance which would have curative value."—*Archives of Pediatrics*.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale.....	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate.....	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate....	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid.....	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Calcium beta-naphthol sul- phonate	{ Abrastol Asaprol
Creosote Tannate.....	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other simi- lar names.)
† Epinephrin	{ Adnephrin Adrenalin Adrenamine Adrenol Adrin Hemostatin Suprarenalin
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine...	{ Aminoform Ammonio-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
" , anhydromethylen citrate..	{ Helmitol
Levulose.....	{ Diabetin Fructose Fruit Sugar
Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin....	{ *Benzanalgene *Analgen *Quinalgen

Paraphenetin carbamid	{ Dulcin Sucrol Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan
Phenyl-dimethyl-parazon... (Germ. Pharm.)	{ Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin
Phenylacetamide.....	{ Acetanilid Antifebrin (And several hundreds of trade names for head- ache powders, etc.)
Phenylmethyl-ketone.....	{ Acetophenone Hypnone
Plant pepsin.....	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of qui- nine.....	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-caffeate.....	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration.....	{ Iodothyrene Thyroidin
Trioxymethylen.....	{ Paraformaldehyde Paraform Triformol
Abrin = Jequiritin	
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Alsol	
Australian oil Eucalyptus = Flucol	
Bismuth chrysophanat = Dermol	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphol	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1 % solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Dimethyl-xanthine = Theobromine	
Guaiacol carbonate = Duotal	
Laricinic Acid = Agaricin	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garantose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloracetic acid, 50% solution = Acetocaustic	

*Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, page 178.

CALIFORNIA COUNTY MEDICAL SOCIETIES.

NAME	PRESIDENT	SECRETARY	MEETS
Alameda County Med. Association.....	Jeremiah Maher, Oakland.....	A. H. Pratt, Oakland.....	Second Tuesday
Butte County Medical Society.....	O. Stansbury, Chico.....	D. H. Moulton, Chico.....	First Monday, E. O. M.
Contra Costa Medical Society.....	J. T. Brennenman, Martinez.....	J. S. Riley, Port Costa.....	First Tuesday
Fresno County Medical Society.....	Geo. A. Hare, Fresno.....	Angus B. Cowan, Fresno.....	Second Tuesday
Humboldt County Med. Society.....	G. W. McKinnon, Arcata.....	G. N. Drysdale, Eureka.....	Second Monday
Kern County Medical Society.....	T. W. Helm, Bakersfield.....	Wm. S. Fowler, Bakersfield.....	First and third Friday
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	First Saturday
Los Angeles County Med. Society.....	W. W. Beckett, Los Angeles.....	Jos. M. King, Los Angeles.....	Quarterly
Marin County Medical Society.....	W. F. Jones, San Rafael.....	W. J. Wickman, San Rafael.....	First Thursday
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	W. N. Moore, Ukiah.....	First Saturday
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	Quarterly
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Dorns Brumwell, King City.....	First Thursday
Napa County Medical Society.....	D. E. Osborne, St. Helena.....	J. L. Arbogast, St. Helena.....	First Saturday
Orange County Medical Assn.....	F. E. Wilson, Westminster.....	H. S. Gordon, Santa Ana.....	Quarterly
Placer County Medical Society.....	Thomas M. Todd, East Auburn.....	R. F. Rooney, Auburn.....	Second Tuesday
Riverside County Medical Society.....	C. W. Girdlestone, Riverside.....	H. R. Martin, Riverside.....	March '04
Sacramento Society for Med. Imp.....	A. M. Henderson, Sacramento.....	J. W. James, Sacramento.....	Third Tuesday
San Benito County Medical Society.....	James H. Tehbets, Hollister.....	J. M. O'Donnell, Hollister.....	First Monday
San Bernardino Medical Assn.....	James P. Booth, Needles.....	Chas. S. Harris, San Bernardino.....	Second Wednesday
San Diego County Medical Society.....	Fred Baker, San Diego.....	T. L. Magee, San Diego.....	First Friday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	Wm. F. Barbat, San Francisco.....	Second Tuesday
San Joaquin County Med. Society.....	D. F. Ray, Stockton.....	Barton J. Powell, Stockton.....	Last Friday
San Luis Obispo County Med. Soc.....	J. S. Jackson, San Luis Obispo.....	J. J. Knowlton, San Luis Obispo.....	Third Wednesday
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	W. B. Cunnane, Santa Barbara.....	Quarterly
Santa Clara County Med. Society.....	J. T. Harris, San Jose.....	F. H. Paterson, San Jose.....	Quarterly
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	Saxton T. Pope, Watsonville.....	Second Thursday
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	R. F. Wallace, Redding.....	Quarterly
Sonoma County Medical Society.....	J. W. Jesse, Santa Rosa.....	G. W. Mallory, Santa Rosa.....	Second Thursday
Tri-County Medical Society.....	P. K. Watters, Watsonville.....	S. T. Pope, Watsonville.....	First Monday
Ventura County Medical Society.....	J. H. Love, Ventura.....	A. A. Maulhardt, Oxnard.....	Quarterly
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	F. R. Fairchilds, Woodland.....	
Yuba and Sutter Cos. Medical Soc.....	J. H. Barr, Marysville.....	G. W. Stratton, Marysville.....	

Secretaries of County Societies are requested to notify the JOURNAL of any changes in above directory.

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31 EDDY STREET, SAN FRANCISCO

A. M. A. Principles of Ethics:

"It is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies."

California State Journal of Medicine.

OWNED AND PUBLISHED MONTHLY BY THE
Medical Society of the State of California

PHILIP MILLS JONES, M. D., Secretary and Editor

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Official Register, - - - }

IMPORTANT NOTICE

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

AUGUST, 1904.

EDITORIAL NOTES.

The officers elected at the last meeting of the A. M. A. were the following: President, Lewis S. McMurtry, Kentucky; Vice-Presidents, Edward Jackson, James Hall Bell, F. C. Shattuck, B. C. Pennington; Secretary, George H. Simmons; Treasurer, Frank Billings; Trustees, T. J. Happel, W. W. Grant, Philip Marvel. The orations are to be delivered by the following gentlemen: "Medicine," Charles G. Stockton; "Surgery," John Collins Warren; "State Medicine," George Blumer. The Association will be presided over during the coming year by Dr. Musser, the retiring president, and Dr. McMurtry will not take charge until the next session, at Portland. Dr. McMurtry has taken an active interest in the Association for many years, and both the Association and Dr. McMurtry are to be congratulated upon the choice of the House of Delegates.

While presidents come and presidents go, the trustees stay on forever, or nearly so. It is the Trustees who are really the American Medical Association, for everything that is done at a meeting must be again enacted by the Trustees, in Illinois, in order for it to be a legally accomplished fact. And also it is the Trustees who guide—and should guard—the business of the association, including the Journal, which is its principal business. T. J. Happel, W. W. Grant, Philip Marvel, E. E. Montgomery, H. L. E. Johnson, A. L. Wright, William H. Welch, Miles Porter and M. L. Harris are the gentlemen who compose the Board of Trustees. Gentlemen, the conduct of

"the greatest advertising medium for proprietary medicines in this country"—the *Journal of the American Medical Association*—is in your hands. What are you going to do with it? Are you going to continue the policy of "Dollars; dirty or clean; DOLLARS"? Or are you going to remember that the Journal of the Association is the property of the members, and that at least some of these members have a sort of shamefaced idea that honesty, right, truth, decency and professional ethics demand a modicum of consideration? Are you going to comfortably forget that the Association has unanimously, and amid great applause, placed itself on record as supporting the fact that "It is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies"? Remember that portion of the phrase, "promote the use of secret remedies"; think about it; let it sink into your mind. It is not right, nor ethical, and it is derogatory to professional character, to do a certain thing. What thing? "To promote the use of secret remedies." When you print the false and fictitious statements of manufacturers of "secret remedies" and distribute to the profession of this country over 30,000 copies of such statements each week, is that "promoting the use of secret remedies," or is it not? Is a net income of \$10,000 a year—which does nobody any good—worth the price of shame which every self-respecting member of the Association must pay for it? Gentlemen, the issue is clearly up to you.

(N. B.—Please do not abuse the editor of the *Journal A. M. A.* He is not responsible for the business management of the *Journal*. And besides, he says he doesn't know which advertisements are unethical.)

County societies should at once undertake the work of getting rid of the illegal practitioners within their territory. The law has now been clearly defined; a goodly number of convictions have been secured by the Board of Examiners, establishing precedents covering practically every point; the method to be followed in securing and presenting evidence has been well established. It now remains but to make effective, in the highest manner possible, the law of the state. The public should not be, for a day longer than is absolutely necessary, preyed upon by the quack and the faker. It is money in the pocket of the physician to allow this sort of thing to go on, for the quacks do more harm than good, and eventually the sufferer must go to the physician for relief. But the medical profession is built upon the rock of self-sacrifice; its every effort for generation after generation has been to prevent sickness; to do away with the necessity of calling upon the doctor for treatment by preventing the advent

of that for which treatment would eventually be required. And so it is with the quack disease. We should be no less "strenuous" in our efforts to eradicate this disease, even though it be at our own financial loss. The Board of Examiners will very gladly co-operate with county societies, but the board will no longer undertake the work of prosecutions. It never was the duty of the board, and was done mainly that the law might be demonstrated and the proper method of prosecuting ascertained. It is now the duty of county societies to go on with the work, and the JOURNAL sincerely trusts that they will not shirk this duty. Alameda has already started its machinery; San Francisco is about to take similar action, and retain an attorney for the purpose of energetically getting after these gold-brick gentry. Which county will be the next in line?

Are we never to have an end of this sort of thing? Pay a dollar-a-month-and-have-no-further-doctor's-bills! Great thing. **CONTRACT PRACTICE.** Effect a large saving in the family expense account. Receive the attention of the foremost (?) doctors and surgeons. Magnificent! But what does the subscriber really get? He gets just exactly what he pays for. He gets a "dollar-a-month doctor" to give him just as little care and attention as a "dollar-a-month doctor" will give. Incidentally, some physician who will not stoop to this sort of work loses a patient; is injured by the man to whom professional ethics and right living mean nothing at all but "words, words, words." All this is apropos of the fact that several new "contract-practice companies" have come into being in the course of the past few months, each, apparently, a little worse than its predecessor. Some of the promoters of these cheap institutions are resident in San Francisco, and we believe that there is a by-law of the medical society of that county prohibiting the use of physicians' names on the published "literature" of such institutions. Cannot this by-law be enforced?

At least two more state societies are on the road to that proper state of existence wherein they will own and publish their own journals. **STATE JOURNALS.** New Jersey and Ohio have the matter under consideration, and probably will eventually undertake the work. Missouri has decided to come into line, and has commenced the publication of its official journal. In Ohio there is some little complication owing to the desire of a privately owned journal to undertake to become the official organ of the State Association. The journal in question is one with which we have no quarrel, but the general principle involved is bad. A state association should absolutely own and control its own journal. Under no other circumstances can

there be absolute independence and freedom; and if there is any one thing which the publication of a state association should be, it is to be independent of all but professional strings.

Another contribution to the literature on digitalis appears in the present issue. The suggestion by our correspondent that often the selection of inert plants may be the cause of the trouble is certainly within the range of probability. Right plants often cost more money than worthless ones; and dollars are dollars. But there are houses with whom this is a secondary consideration, and it cannot account for all the trouble. Probably the real fault in the majority of cases is in the manner of preparation. The active principles which should exist in preparations of digitalis, and to which the remedy owes its therapeutic value, are in the form of delicate, unstable glycerids, glucosids, etc., and are utterly destroyed by improper handling or too much heat. A skilled pharmacist, working with properly selected plants of the right sort, ought to have no difficulty in producing an absolutely reliable preparation of digitalis. If physicians would only go back to the safe, reliable, ethical and decent paths which their feet did formerly tread, and not be led into the by-ways of new and untried fads, "preparations," unknown mixtures with what-they-are-good-for on the label, and other such nonsensical nostrums, three classes would be benefited—the patient, the pharmacist and the physician himself.

The JOURNAL is very glad indeed to announce that a goodly number of the printed slips of the amount of alcohol contained in various nostrums have been called for. **ALCOHOL NOSTRUMS.** This table was printed in the June number, and there are still plenty of slips for those who may care to have them. All you need to do is to send us a request, and they will be forwarded by return mail. The work of making the people understand just what they are putting into their stomachs when they take these vile alcoholic mixtures should be the duty of every physician in the state. If an individual will insist upon drinking, let him at least drink something purer than this stuff; he could get decent whisky for less money.

A. M. A. FINANCIAL STATEMENT.

The report of the Board of Trustees, which is really the financial statement of the Association, published in the Journal for June 18th, pages 1635 to 1638, is a very interesting document, and well worthy careful study. The deductions made in the report from the figures presented are also worth considering. For instance, the auditor's statement shows:

Total revenue, of all sorts.....	\$224,424.52
Total expenses, of all sorts.....	186,322.46

Net profit for year.....	\$38,102.06
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(How much of this \$38,102.06 was received for advertising "secret remedies," in violation of the principles of ethics of the American Medical Association, is not stated, and is merely an incidental query.)

The amount received for dues and interest is:

Dues	\$63,237.48
Interest and income from rents....	1,960.34

Income of the Association, not including Journal income.	\$65,197.82
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Against this revenue can be charged, as given on page 1637, the following:

Organization expense	\$5,323.19
Association expense	6,629.80

Total Association expense....	\$11,952.99
-------------------------------	-------------

As the report states that "This amount is an expense incurred by the Association, that has absolutely nothing to do with the expense of the Journal," we may assume that no other items of expense are chargeable to the Association per se, and not to the Journal.

Association income	\$65,197.82
Association expense	11,952.99

Association, net income.....	\$53,244.83
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Against this net income from the Association as such, without reference to the Journal income, and from the figures of the report itself, consider the following:

Association, net income	\$53,244.83
Association and Journal net income	38,102.46

Cost of Journal to Association.	\$15,142.77
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In other words, the members of the American Medical Association are paying \$15,142.77 for the privilege of publishing the "greatest advertising medium for proprietary medicines in this country," while at the same time announcing to the world at large that they believe it "is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies." Lovely; makes one swell up and feel proud and chesty. The trustees do not make this deduction from the report, but the figures are there.

VALUE OF BIG GAME.

The principal cities of California, strangely like the big cities everywhere else, are infested with quacks and illegal practitioners. The argument is so old that it is long past the stage of respect, that prosecutions should be confined to these small-fry quacks, and that prominent or able men, who, for various good and sufficient (?) reasons, may not have taken out a state license, should not be molested. Recently the issue has been raised by reason of the arrest and prosecution, by the Board of Medical Ex-

aminers, of a most estimable gentleman who was doing some clinical work in San Francisco, and, as was subsequently shown by his conviction, was really practicing medicine. Dr. A. Schmoll was to have read a paper before the San Francisco County Society, but when the status of the case was made known, the paper was withdrawn. Dr. Schmoll is unquestionably a very able man, and the issue was a purely technical one. But the law is the law, and to go after the small fry and leave undisturbed the man of attainments who is just as clearly in violation of the law, would be to make fish of one class and game of another; obviously unjust. An eastern medical journal has seen fit to comment adversely on this action by the Board of Examiners, and letters of criticism have been written to the JOURNAL on the same subject. In the present case the verdict was a purely technical one—guilty as charged—and no fine was imposed by the court; nor was any fine asked by the prosecution. Cannot the critics of such action see that to secure a conviction in a case like that under discussion is a most valuable precedent? The court records now show that discrimination is eliminated from the case when the medical practice law is in question; that the reputation or professional standing of a man is of no weight in the trial of the one fact—HAS THIS MAN A LICENSE TO PRACTICE MEDICINE OR HAS HE NOT? Small fry and big game are alike before the law, and we have shown that such is the case. The precedent cannot be undervalued, for as time goes by it will be again and again recalled that friends, professional standing, reputation, ability, scientific attainments nor anything else can be permitted to influence or modify the question at issue—HAS THIS MAN WHO IS PRACTICING MEDICINE IN CALIFORNIA SECURED A LICENSE TO DO SO? There can be no question of persecution, so often urged in the trial of illegal practitioners, when it is a matter of record that all are treated alike; that there is no class especially favored by the law. Therefore, with due regard and respect for our critics, we must congratulate the board on its action, and the court upon its decision; the law has been maintained.

[NOTE.—Since the foregoing editorial was written and put into type, a singular and most untoward thing has occurred. A great deal of pressure and "influence" was brought to bear, the case against Dr. Schmoll was reopened, and he was discharged on the ground that his professional services had been given gratuitously. The actual question at issue—whether the doctor was practicing without a license—was ignored. For medical men to aid in even technically setting aside the wise provisions of the law is a serious mistake, and soon or late those who are largely responsible for such a result, in the present case, will see the harm they have done, and will regret it.]

COMMUNICATIONS.

Hospital Nurses' Association.

To the Editor of the STATE JOURNAL: The nurses of the Children's Hospital Nurses' Association are endeavoring to complete the sum of \$5,000 required to endow a room for its sick members. Although the nurses are contributing to this cause, the need of such a room is so urgent that we turn to outside friends for gifts of money they may feel inclined to subscribe. Believing that there are many physicians in the State who would be glad to help us in this way, if they knew of the effort we are making, we would ask you to bring the matter to their attention, either by the publication of this letter, or in such a manner as may seem best, through the columns of the STATE JOURNAL. HELEN P. CRISWELL, President.

Preparations of Digitalis.

To the Editor of the STATE JOURNAL: I am surprised to read in your last number the communication from C. H. S., in which he relates his unsatisfactory experience with digitalis.

From the standpoint of the pharmacist this is worthy of attention, as we have always believed digitalis to be one of the "old reliables." It seems strange that the doctor should have had trouble with so many different makes; but it only goes to emphasize a point I have always contended for, and that is that the pharmacist is the proper person to depend upon for results, and not the manufacturer.

There is a firm of dealers in botanic drugs in England, with a branch house in New York, who grow their own digitalis and other toxic drugs. Their drug is grown right, dried right and shipped right, and any druggist who cares to take the trouble and pay the price can secure their goods.

If he will strip the mid-rib from the leaf, grind the drug carefully, and follow the U. S. P. process of manufacture, he can turn out a tincture, fluid extract or infusion that will do all that we are educated to expect from digitalis.

I know whereof I speak, as some physicians have come to me after using a preparation of digitalis from our laboratory prepared in the foregoing manner, and asked me to save that particular lot for their use, as the results were positive. On explaining to them that it would always be possible to get a preparation of equal potency, they have been content. And what a world of satisfaction it is to a pharmacist to have the physician depending upon him to help fight the battles of the sick.

And not only is this all true of digitalis, but of belladonna, aconite, hyoscyamus, lobelia and many others. There is no guesswork about it. There are some drugs in the pharmacopoeia that have stood the test of years and the strain of polypharmacy. The manufacturing pharmacist may spoil them at times in an effort to make them palatable, and a careless druggist may disgust the physician by the sloppy way in which he turns them out; but given intelligent handling from the time of planting to the time of dispensing; given a vehicle in the Rx whereby their delicate alkaloids or glucosides are not antagonized and made inert, the practitioner will find that his text-books are right when they speak of certain drugs as dependable.

K. B. BOWERMAN.

San Francisco, June 12, 1904.

Army Medical Service.

War Department, Office of the Surgeon-General, Washington, June 27, 1904.

To the Editor of the STATE JOURNAL:—Sir: I am instructed by the Surgeon-General to send you the enclosed draft of a notice regarding changes in examinations for the Army Medical Service, and to state that he would be pleased to have it appear in

the next issue of your journal, or so much of it as you may find space for. I enclose also a copy of "Circular of Information," containing all published facts regarding the amended regulations, and from which you can use extracts in lieu of the notice, should such a course be desirable. Very respectfully,

M. W. IRELAND, Major, Surgeon, U. S. Army.

EXAMINATION FOR ARMY MEDICAL SERVICE.

The examination of applicants for commission in the Medical Corps of the Army will be materially modified after July 1, 1904, when the amended regulations governing the matter will go into effect. Immediate appointment of applicants after successful physical and professional examination—the latter embracing all subjects of a medical education—will be discontinued; thereafter applicants will be subjected to a preliminary examination and a final or qualifying examination, with a course of instruction at the Army Medical School in Washington intervening.

The preliminary examination will consist of a rigid inquiry into the physical qualifications of applicants, and written examination in the following subjects: Mathematics (arithmetic, algebra and plane geometry); geography; history (especially of the United States); Latin grammar and reading of easy Latin prose; English grammar, orthography, composition; anatomy; physiology; chemistry and physics; materia medica and therapeutics; normal histology. The subjects in general education above mentioned are an essential part of the examination, and cannot, under any circumstances, be waived.

The preliminary examination will be conducted concurrently throughout the United States by boards of medical officers at most convenient points; the questions submitted to all applicants will be identical, thus assuring a thoroughly competitive feature, and all papers will be criticized and graded by an Army Medical Board in Washington. Applicants who attain a general average of 80 per cent and upward in this examination will be employed as contract surgeons, and ordered to the Army Medical School for instruction as candidates for admission to the Medical Corps of the Army; if, however, a greater number of applicants attain the required average than can be accommodated at the school, the requisite number will be selected according to relative standing in the examination.

The course of instruction at the Army Medical School will consist of lectures and practical work in subjects peculiarly appropriate to the duties which a medical officer is called upon to perform. While at this school the students will be held under military discipline, and character, habits and general deportment closely observed.

The final or qualifying examination will be held at the close of the school term, and will comprise the subjects taught in the school, together with the following professional subjects not included in the preliminary examination: Surgery; practice of medicine; diseases of women and children; obstetrics; hygiene; bacteriology and pathology; general aptitude will be marked from observation during the school term. A general average of 80 per cent in this examination will be required as qualifying for appointment, and candidates attaining the highest percentages will be selected for commission to the extent of the existing vacancies in the Medical Department. Candidates who attain the requisite general average who fail to receive commissions will be given certificates of graduation at the school, and will be preferred for appointment as medical officers of volunteers or for employment as contract surgeons; they will also be given opportunity to take the qualifying examination with the next succeeding class.

It is not thought that, for the present at least, the number successfully passing the preliminary examination will be greater than can be accommodated at the Army Medical School, nor that the number qualifying for appointment will exceed the number of vacancies. If, however, the class of candidates qualifying should be larger than reasonably thought, the young physicians who fail to receive commissions will not have wasted their time, as the course of instruction at the school, while in a large measure specialized to army needs, is such as will better fit them for other professional pursuits; and furthermore, they will have received a fair compensation while under instruction.

Admission to the preliminary examination can be had only upon invitation from the Surgeon-General of the Army, issued after formal application to the Secretary of War for permission to appear for examination. No applicant whose age exceeds thirty years will be permitted to take the examination; and the authorities at the War Department desire it distinctly understood that this limit of age will be rigidly adhered to. Hospital training and practical experience are essential requisites, and an applicant will be expected to present evidence of one year's hospital experience or its equivalent (two years) in practice.

The first preliminary examination, under the amended regulations above referred to, will be held in August. Those desiring to enter for examination at any time should communicate with the Surgeon-General of the Army, Washington, D. C., who will be pleased to furnish all possible information in regard thereto.

PUBLICATIONS.

Fat Testing of Cream by the Babcock Method has been issued by the Department of Agriculture as Bulletin 58, and should be of interest to all milk inspectors and boards of health interested in the pure milk question.

A Plea for Justice for the Consumptive, by S. A. Knopf, M. D., of New York, is a reprint of his address before the Society of Medical Jurisprudence. It is a powerful and straightforward attack on phthisiophobia, and the author deplores that action of the P. H. & M. H. Service which declared tuberculosis a dangerous contagious disease.

Lipase in the Urine as the Result of Experimental Pancreatic Disease, by Dr. A. L. Hewlett of San Francisco, read before the California Academy of Medicine, and published in the *Journal of Medical Research*, was abstracted at the time the paper was read by Dr. Hewlett. Research work of this sort is very valuable, and Dr. Hewlett is to be congratulated upon his work.

The President's Address, delivered by Dr. Wendell Phillips upon his election as president of the New York County Medical Society, in reprint form, is an interesting monograph. It deals, in large measure, with the treatment by the County Society of the numerous pests of quacks, abortionists, fakers of all sorts, and the gentry who prey upon the public, aided by the advertising columns of the daily press.

The Practitioner (London), for July, has a symposium on "Syphilis," including eleven papers on the subject: "History of Syphilis in France Since Ricord," by Paul Gastou; "Mercurial Injections," by Louis Wickham; "Treatment in Wiesbaden," by Karl Tontou; "Treatment at Aix-la-Chapelle," by Anton Lieven; "Zittman Treatment of Tertiary Syphilis," by Sir Alfred Cooper; "Disease of the Brain," by F. W. Mott; "Serum Treatment," by J. Ernest Lane; "Syphilis in Egypt," by Frank Cole Madden; "Syphilis in Children," by George F. Still; "Ocular Manifestations," by Walter H. Jessop; "Disease and Treatment in Upper Air Passages," by St. Clair Thomson.

Has Craw-Craw Come to Stay? by J. Dencer Whittles, B. D. S., etc., University of Birmingham. Monograph forwarded through the courtesy of the Smithsonian Institution. Craw-craw is described by the author as a rather newly observed general infection by a nematode, the vehicle of transmission being probably milk; he has found the parasite in milk on several occasions. "One of the commonest symptoms is a frequent intolerable itching of the skin." The disease has occasionally been mistaken for smallpox. The disease is common to the west coast of Africa, where it is said of the natives that "all of them, male and female, have it sooner or later." It was probably brought to England by the returning soldiers, and is now reported to be so common in some sections of Birmingham that "five out of six" or "every other" person seen, has it.

Growth of Algae; A Method of Destroying or Preventing The, and Certain Pathogenic Bacteria in Water Supplies, is Bulletin No. 64 of the Department of Agriculture. "Dr. Moore and Mr. Kellerman have shown that it is entirely practicable to cheaply and quickly destroy objectionable algae in small lakes, ponds, storage reservoirs, and other similar bodies of water by the use of extremely dilute solution of copper sulphate or of metallic copper. The fact that an extremely dilute solution (one to one hundred thousand) will also destroy the most virulent typhoid and cholera bacteria at ordinary temperatures in three hours is of great importance and significance. Solutions of copper as dilute as this are not considered injurious to man or other animals. The value of copper, especially colloidal, in preventing or treating typhoid and other related diseases should be carefully investigated by competent pathologists."

PERSONALS.

Dr. Leo Newmark of San Francisco has gone to Europe to be absent about four months.

Dr. W. Edward Hibbard of Pasadena has gone to Germany on a three or four months' visit.

Dr. George H. Fay has changed his location from East Auburn to Forest Hill, Placer county.

Dr. Henry Waldo Coe, editor of the *Medical Sentinel*, Portland, Or., has been nominated for State Senator.

Dr. Cornelius Van Zwahlenburg of Riverside passed through San Francisco on July 19th on his way to Europe.

Dr. Otis B. Spalding has located at Yreka, Siskiyou county, recently having had offices in the Starr King building, San Francisco.

Dr. George Chismore met with another accident about the middle of July, sustaining a fracture of the leg through a fall. The JOURNAL trusts he will have a prompt and satisfactory recovery.

Dr. Barton J. Powell, secretary of the San Joaquin County Medical Society, was a welcome caller at the JOURNAL office a few days ago. The San Joaquin Society holds no meetings in July and August, which explains the non-appearance of the interesting reports sent in by Dr. Powell.

Born, at Santa Rosa, to Dr. and Mrs. G. W. Mallory, a fine nine-pound girl baby. As the doctor's family heretofore consisted of five boys, the advent of the little sister is hailed with great delight. The STATE JOURNAL joins in congratulations, and is pleased to learn that mother and babe are "doing fine."

Dr. P. J. H. Farrell, now living in Chicago, but for several years located in San Francisco, seems to have a faculty for being in the vicinity of excitement. At the time of the Iroquois Theater fire he was standing on the nearest corner, and was the first physician to engage in rescue work. News has come that he has recently been in a rather serious railroad wreck, where he escaped injury, and then proceeded to aid a number of other passengers. Dr. Farrell was for some two years in the Philippines as surgeon with the California troops.

Change of address, San Francisco: Dr. A. W. Perry, 1236 Market to Grant building; Dr. J. E. Nast, 1354 Folsom to Grant building; Dr. Clarence Quinan, 751 to 369 Sutter street; Dr. F. B. Sutherland, Starr King building to 939 Bush; Dr. C. G. Kuhlman, 338 Eddy to 936 Van Ness; Dr. H. Herrington, 467 Geary to 1688 Post; Dr. H. A. Ohrwall, 502 Sutter to 701 Howard; Dr. L. W. Spriggs, 499 Eddy to Hotel Stewart; Dr. Charles Phipps, 1496 Fulton to 750 Ellis; Dr. C. M. Troppman, 1206 to 1584 Market; Dr. C. S. Nagel, 1220 to 731 Sutter; Dr. Alfred Eichler (residence) from 1242 Mission to Nineteenth and Eureka streets.

OF COURSE.

The *American Journal of Surgery and Gynecology* quotes an editorial in the Cincinnati *Lancet-Clinic*, dealing with the question of the *Journal A. M. A.*, state journals, advertising, etc. It is rather involved, and but one portion attracts attention. "A medical journal, like a newspaper, generally reflects the characteristics of its subscribers. If its subscribers ask for a scientific journal, it will necessarily have to be forthcoming. * * * We have a precedent thoroughly demonstrating this fact, as instanced in the CALIFORNIA STATE MEDICAL JOURNAL. When the profession of that State recently demanded that the editorial columns of the STATE JOURNAL be confined to subjects strictly scientific, the change was at once made." Why, certainly!

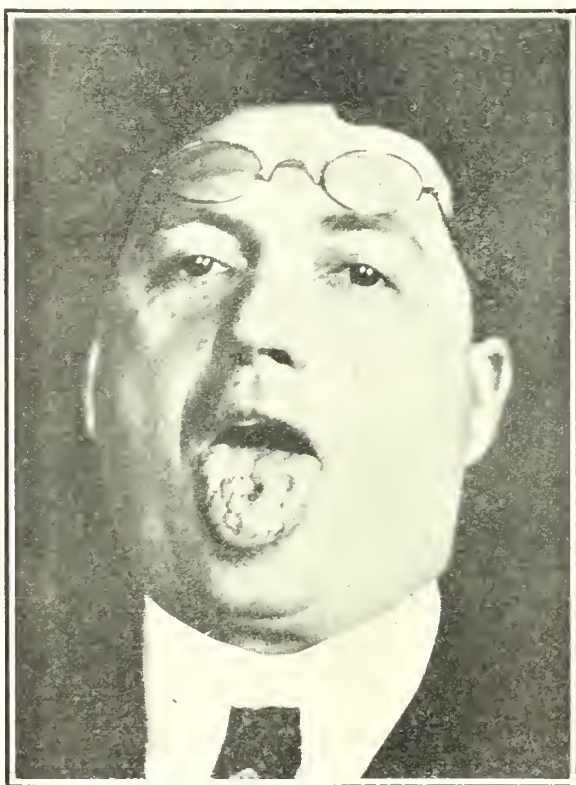
Name Misspelled.—A regrettable typographical error in the July issue of the STATE JOURNAL gave the name of the author of the important paper on "Complications and Sequelæ of Measles" as J. Mayer, when it should have been J. Maher, M. D.

PRELIMINARY REPORT ON A PECULIAR INFECTION OF THE MOUTH AND THROAT, WITH A NEW VARIETY OF OIDIUM RESEMBLING THRUSH.

By H. R. OLIVER, M. D., San Francisco.

DURING the past year I have had under my care, and have seen in consultation with other physicians, about sixteen cases of a peculiar infection of the mouth, tonsils and pharynx. The conditions vary in many of the cases in severity, extension, age, acuteness and chronicity. Most of them were of the chronic form, and were in patients over twelve years of age. The acute form was seen in three children under twelve. I shall present them, as one composite case, as follows:

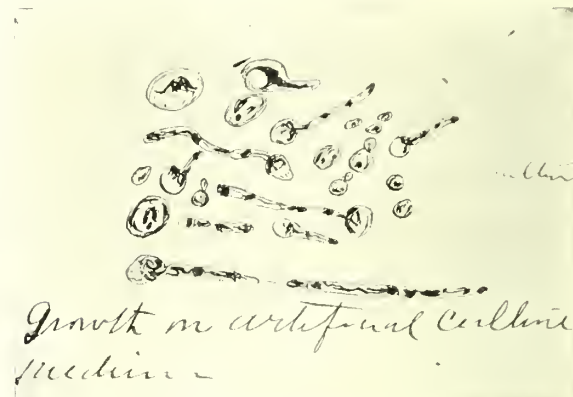
The first symptom noticed by the patient is a hard, dry, itchy, paroxysmal cough, difficulty and pain in



Tongue lesion of very chronic case—14 years' duration.

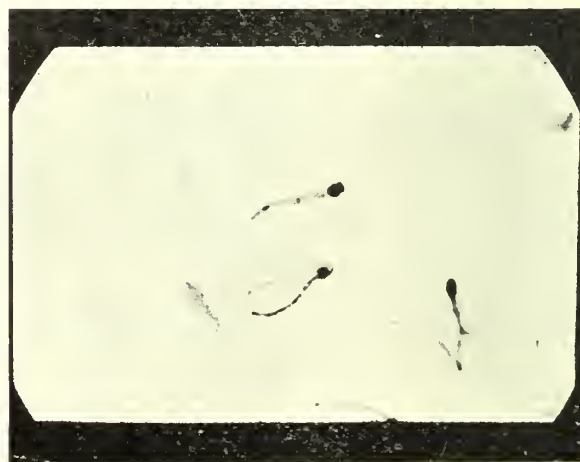
swallowing, some coryza, pain above the eyes, aching of back and limbs. Inspecting the mouth, one first sees a coated tongue, strawberry in character, intense hyperemia of tonsils, uvula and post-pharyngeal wall. This is soon followed by enlargement of the tonsils and uvula, until they nearly meet, the tonsil being covered with a small amount of thin, grayish white, slime-like membrane, the uvula remaining clean, the cervical and submaxillary lymph glands become swollen and tender; the temperature may remain normal, or reach 102 or 103 degrees. The membrane on the pharyngeal wall forms in a letter V shape, with the point downward, and is definitely outlined. This, with the membrane on the tonsils, which thickens in patches, and becomes adherent, is elevated, pearl gray in color, and bleeds if irritated. About this time small, gray, elevated, hard and firmly attached patches occur on the tongue, near its center as a rule, but may reach to its tip, and extend over the side. They are about the size of a large pin's head, and

larger. The glands of the neck become larger, the cellular tissue in some cases edematous, and the temperature may rise to 103 degrees. The patches on the tongue unite and form larger patches, as the disease progresses. They are about a ten-cent piece to a twenty-five-cent piece in size, irregular in outline,



Growth on artificial culture medium.

elevated, firm, furry to touch, and can be removed only with difficulty and pain. At this time the trouble in the pharynx subsides and clears, leaving a red granular surface, which is very irritable, causing a hard, distressing cough. The tonsils next clear, or in some cases form deep ulcers with a punched-out appearance and grayish bases, the patches having sloughed. They are generally situated in the sulci, at the top of the tonsil. The glands of the neck having reduced in size, and the swelling subsided, the temperature falls, the cough becomes hacking in nature, and the voice may become hoarse. The pain in swallowing remains. As the disease on the tongue progresses the patches enlarge and others form, until it has a pinto appearance. In places some of the patches slough, or fall out, and leave deep, irregular ulcers, extending through the epithelium into the submucous tissue. They have gray bases, and heal with difficulty, leaving scars. If the tongue is irritated, it



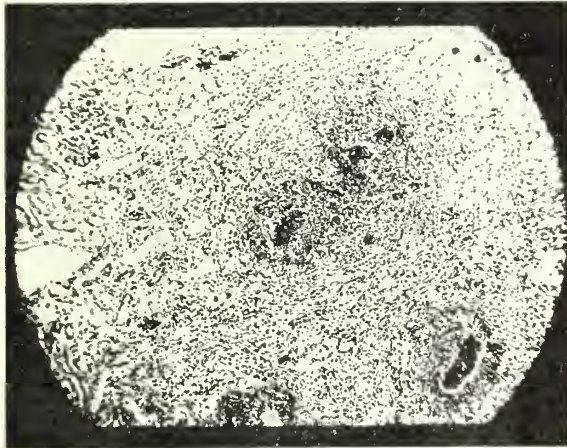
Micro-photo of organism taken from slide prepared direct from scraping of lesion of tongue.

may swell so that it even protrudes from the mouth. This happened to one of my patients. These ulcers and patches may remain some time. In one case, a man of 30, strong and athletic, they remained for three months. In another, a strong, healthy man of 50, ulcers on the tonsils remained for six months. The

best treatment I found to be a wash, suggested in Reynold's Medicine, prescribed by John Hunter:

Sodii sulphite dram, 1
Water ounce, 1
To this I added glycerin . . . ounces, ss.
The deep ulcers I touched with Ag No. 3.

From the patches in the mouth of these patients cover-slip smears show numerous round or ovoid bodies, 6 to 8 u. in diameter, with double contour,



Abscess formation in cortex of kidney of rabbit (intravenous injection) at death, 3½ days.

staining lightly, except a larger chromatin granule, situated at the thick end; joining at this point by a constricted neck is a more or less long thread, which may or may not be jointed. It takes the stain lightly, except in spots which stain deep, and are connected to each other by a skein-like filament of deeply staining chromatin substance. These threads may be branched. I have never seen more than one oval body at their end; that is, not a series. In some cases the threads are very short, and seem to be pushed-out pieces of the oval body. They stain by Gram's and all the basic anilin dyes.

To obtain a pure culture is not easy, nor to get them to grow at all on artificial media. The only medium I succeeded with was one of 8 per cent glucose agar, to which I added 1 per cent HCl. The HCl must be added last, or the medium will not solidify. I obtained pure cultures in nine cases. They grow slowly, taking six to seven days, but once getting a pure culture they grow easily on all media. The growth differs somewhat with the severity of the disease, the more severe the more threads form and the more tenacious the growth on the media. On agar it forms thick, opaque, moist growth, elevated, and some filaments reaching into the medium. Gelatin is not liquified. Litmus milk unchanged. Potato, thick, opaque, white growth. Bouillon no cloud, but heavy sediment. Glucose agar not fermented. Fermentation tube; glucose urine does not ferment. Cover-slips of a fresh culture show oval bodies about 3 to 6 u. in diameter, containing dark staining granule, and irregular masses of chromatin. Some short cylinders, and some spherules with short threads attached. In some cases long threads.

Experiments on Animals.—Brought into general circulation of rabbits, it forms multiple abscesses in all the organs except the lungs, especially the kidneys, which may be so studded with these small millet-seed sized, whitish yellow nodes that the tissue between is scarcely visible, and the organ becomes very pale, and is much enlarged. The right side of the heart is especially affected. The liver, spleen, adrenal, lymph glands, peritoneum, pericardium, brain, parotids and submaxillary glands show them, and pure cultures

were obtained from all these organs, and from the urine. The rabbits died in from three and a half to five days, the ones inoculated with cultures containing the longer filaments died in the shortest time. Subcutaneous injection causes a large abscess at the seat of puncture, with many metastatic abscesses in the surrounding skin, and small metastatic abscesses in kidney, spleen and liver. Intraperitoneal inoculation caused general infection and abscess formation in all organs of the abdominal cavity. The organisms were recovered from the blood and urine. One animal in whose mouth I had placed a large amount of pure culture showed an intensely hyperemic pharyngeal wall covered with a slimy membrane, but no ulcers were formed, the animal having died on the sixth day from general infection. As it had swallowed a large amount, the stomach and intestines showed patches and abscesses in their walls. From the mouth I made smears, and found the threaded oval bodies; in culture, recovered the oval bodies in mixed cultures. The urine in all the rabbits showed a large amount of albumin, and a large number of granular casts.

Microscopical Examination of Organs.—Portions of organs hardened in Orth fluid; and in alcohol, blocked, and sectioned, and stained with Weigert's modification of Gram's method, show many small miliary abscesses, in the centers of which were found a number of the oval-threaded bodies, and spindle-shaped and oval cells above described. Forming a background and surrounding them is a necrotic mass of fibrin, dead cells, and broken nuclei, around this is a large mass of polymorphonuclear nuclear leukocytes, and lymphocytes, and on the outer border are seen epithelioid cells, then tissue structure. In the kidney, in which they were most numerous, and which I studied the most, these abscesses were found to be situated mostly in the convoluted tubules of the cortex, none being found around the glomeruli, and few in the medulla. The epithelium of the convoluted tubes suffered most, was swollen and lost its nuclei. I was struck with the size of the abscesses, both in the skin and other organs, there being so much necrosis in proportion to the number of organisms present.

First—In the rabbit I produced the pharyngeal symptoms by inoculation with a pure culture, although ulceration did not take place, probably because the animal died before there was really time for the formation of ulcers.

Second—In two instances three patients in one family were affected, one after the other; in one, one of the patients, a young man of 20, was away from home, and on returning contracted it, his sister being then a sufferer.

Third—I am sorry to state that, unfortunately for him, one of our doctor friends came to work in the laboratory, at the table where I had been doing my autopsies on rabbits, and had worked with pure culture only. He became infected, and showed all the acute symptoms. I made smears from the tonsils and pharynx, and found numbers of the organism. He kindly delayed treatment until the fourth day, when the small patches appeared on the tongue, and from these I obtained the organisms in almost pure culture. He was put on the treatment recommended, and is now nearly well, only a slight cough remaining.

I think this makes it at least highly probable that the fungus is the cause of the disease.

In closing, I wish to thank Professor William Ophüls, who has kindly guided and assisted me in many ways, and Dr. H. O. Von der Leith, who was the patient sufferer.

[From the pathological laboratory of Cooper Medical College, San Francisco. Read before the Cooper College Science Club, March 1, 1904.]

ILLUSTRATIVE CASES OF MYELOGENOUS LEUKEMIA.—PRELIMINARY REPORT.*

By GEORGE H. EVANS, M. D., San Francisco.

THIS is the object, in this paper, to present a history of three cases of this disease, and to call particular attention to the treatment which has been, and is being, carried out in two of them.

Case 1. R. R., was admitted to the medical service of St. Luke's Hospital, October 18, 1903. Male, age 61; family history negative. History: He denied venery; had had typhoid and influenza, the latter three or four times. Ten years ago he slipped and "strained his left side," and has had some soreness in the region ever since. For three years he has been troubled with frequency of urination. For the past three weeks he has been getting weaker, and is now suffering from dyspnea and cyanosis.

He appears fairly well developed and nourished. His right eye is artificial, the left reacts normally. His tongue is slightly coated. Pulse is 136, regular, equal, low tension, small volume. Arteries are sclerotic. Heart outline is obscured by surrounding dullness. Apex beat is heard with maximum intensity at the end of the sternum. A soft systolic murmur is heard at the end of the sternum and right second interspace. Sounds are rapid and weak. Right lung is hyperresonant, vocal fremitus and breath sounds exaggerated. Left lung is dull throughout its entire area except supra- and infra-clavicular, and supra-scapular regions. Vocal fremitus is lost and vocal resonance much decreased over entire dull area. The abdomen is prominent; a tumor is palpable continuous with splenic cardiac and pulmonary dullness, filling left side of abdomen and extending well over into the right superior and inferior quadrants. Feet are somewhat swollen and edematous. Prostate gland is enlarged. Catheterization immediately after urination obtained only a few drops of highly colored urine with a thick sediment. The urine was acid, with a sp. gr. of 1022; no sugar, a trace of albumen, the sediment consisting of amorphous urates, hyaline and granular casts, uric acid crystals, and some squamous epithelial cells. A blood examination revealed 3,860,000 red cells, hemoglobin 75%, leucocytes 45,490, of which 55% were polymorphonuclear neutrophils, 13% lymphocytes, 25% myelocytes, 7% eosinophiles; no nucleated red cells, no poikilocytosis.

Magnesium sulfate was administered, strychnin and digitalis given, and hot compresses applied over the bladder to relieve the pain and tenesmus with which he suffered. Anuria became a distressing and prominent feature, and repeated catheterization being futile, the encroachment of the tumor mass in the pubic region making it impossible to tell whether or not the bladder contained urine, hypodermoclysis of salt solution was resorted to, which was followed by voluntary and fairly copious urination. On Oct. 25, the leucocytes had increased to 89,400, of which 57% were polymorphonuclears, 6% lymphocytes, 10% eosinophiles, 27% myelocytes, with a few normoblasts visible.

Oct. 27. The morning of the day he died, the red cells numbered 4,130,000, hemoglobin 70%, leucocytes 98,000; polymorphonuclears 55%, lymphocytes 11%, myelocytes 27%, eosinophiles 3%. Since his entrance dyspnea has been a constantly distressing symptom, his respiration ranging from 26 to 40, his pulse from 100 to 136. The entire course was afebrile. He became progressively weaker from the time of his admission, and died on the evening of October 27.

Autopsy: The liver weighed 2,430 grammes. The cut surface was of a pale brownish color; consistency rather soft. Microscopically the capillaries were everywhere dilated, and contained great numbers of leucocytes, especially myelocytes. The liver cells contained a small amount of brown pigment.

The lungs weighed 276 and 253 grammes respectively. They showed moderate anthracosis and the cut surface was somewhat edematous. Microscopic sections showed distention of the capillaries of the trabeculae which were filled with blood and showed many white cells, especially myelocytes.

The heart weighed 360 grammes. It was large, pale and flabby; both auricles and ventricles contained postmortem clots.

The kidneys weighed 148 and 153 grammes respectively; the pelves and ureters were much dilated. The pelves contained a number of adherent ante-mortem clots, with a quantity of brownish semi-fluid material. The cortex was diminished on both sides; the capsule adherent in spots. On section were seen many good-sized areas in the cortex consisting of cellular connective tissue; in many places the connective tissue stroma of the cortex was increased; also there were areas in which the tubules had entirely lost their lining epithelium and were filled with coagulated fluid. In other places the epithelium of the tubules showed necrosis and disintegration.

The spleen weighed 2,130 grammes; its capsule was thickened and its substance very soft and friable. Micro-

scopic section showed many areas of intense hyperemia under the capsule. The spleen substance was heavily infiltrated with myelocytes; in spots there was some brown pigmentation of the cells of the spleen pulp.

No examination was made of the bone marrow.

Case 2. Mrs. B. was referred to me by Dr. H. M. Sherman, October 9, 1903. Age 29, born in Tennessee. Family history unimportant. She has always led an out-of-door life. She had scarlet fever when a child, and when 12 or 13 years of age had malaria. She lived in Tennessee and Kentucky before coming to California a few years ago. She has not felt well since her last child was born five years ago. Menses always normal, except the month before coming to me, when she had menorrhagia. One year ago she noticed a swelling in her abdomen, and has grown continuously weaker. In appearance she is tall, looks pale, and more than the stated age.

Physical examination: There is prolonged expiration at the apices of both lungs posteriorly. The heart boundaries are at the third rib above, two cm. inside the mammary line at the left, and four and one-half cm. from the sternum at the right. A soft systolic murmur is heard, most distinctly at the pulmonary orifice, and the second pulmonic sound is much accentuated.

The abdomen presents a full rounded prominence occupying the left superior and inferior, and right inferior quadrants. Splenic dullness extends up to the seventh rib. A dull mass continuous with splenic dullness extends to a distance of 7 cm. below a transverse line drawn through the umbilicus, and 6 cm. to the right of the median line. The liver is not enlarged downward, its upper border is at the fifth rib. This mass is tender on palpation. The veins of the legs are distended, and there are ecchymotic spots on the body.

Blood examination showed red cells 4,200,000, hemoglobin 60%, leucocytes 240,000 of which 70% were polymorphonuclear neutrophils, 8% lymphocytes, 20% myelocytes, and 2% were eosinophiles; two nucleated red cells were seen; no poikilocytosis.

A diagnosis of myelogenous leukemia was made. Fowler's solution in increasing doses was prescribed, and husband informed of the grave and heretofore hopeless prognosis. Scnn having reported a case successfully treated by the X-ray (*Medical Record*, Aug. 22, 1903) this treatment was begun with this patient, October 19, the splenic tumor being exposed to rays emanating from a medium high vacuum tube, at an average distance of 10 inches, for from 15 to 20 minutes daily. October 24, after six treatments, the splenic mass had decreased 2 cm. in its transverse measurement, and the leucocytes had decreased to 132,000. The patient felt better, but complained of considerable thirst since the beginning of treatment. November 5 she complained of chills, fever, and anorexia, and had been coughing for three days. There was dullness at the right apex, and faint mucous rales over both apices behind. Temperature was 100.4°, pulse 94. Rest in bed and appropriate treatment was instituted. No tubercle bacilli were found in her sputum. She recovered uneventfully and X-ray treatments were resumed after a lapse of ten days. Fowler's solution was at this time discontinued.

Dec. 11, the leucocytes numbered 100,800 (with a differential count as follows: polymorphonuclear neutrophils 52%, lymphocytes 1%) myelocytes 41%, eosinophiles 6%; one nucleated red cell was seen. The spleen was felt 2 cm. to the right of the umbilicus.

Jan. 11, 1904, the leucocytes had decreased to 80,000, the myelocytes being only 27%; and on February 11, the leucocytes numbered 77,000 with a relative count of myelocytes of only 15%, many of them having a large indented nucleus. There were 4% of eosinophiles, some of which were eosinophilic myelocytes. There was no change in the number of red cells. The spleen extended only to the median line, and below to a distance of 6 cm. below the umbilical line in the left inferior quadrant.

March 11, the red cells had decreased to 3,500,000, hemoglobin 60%, and the leucocytes had increased to 117,500 (with polymorphonuclears 58%, small lymphocytes 3%, large lymphocytes 5%) myelocytes 33%, (and eosinophiles 1%); a few nucleated red cells were seen. At this time the patient complained that for the last two weeks she had been having chills, occasional attacks of vertigo, headache, and loss of appetite, with considerable tenderness on pressure over the spleen. Treatments were temporarily stopped, she was put to bed, and the apparent toxemia treated with cathartics and small doses of strychnin. At this time an examination of the spleen showed some enlargement; it extended 4 cm. to the right of the median line, and 5½ cm. below the umbilical line at its lowest point. This condition lasted a week, during which time there was a slight febrile reaction (the temperature reaching 99.5°).

March 19, X-ray treatments were resumed and have progressed without interruption to the time of writing. April 1, a blood examination showed 3,650,000 red cells, hemoglobin 70%, leucocytes 88,000; polymorphonuclears 64%, small lymphocytes 5, large lymphocytes 4%, myelocyte 21%, transitionals 4%, eosinophiles 2%, an occasional nucleated, red cell was seen. This differential count, as the others, was based on a count of more than 500 cells.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

Her spleen was felt in the median line, and was about 5 cm. below the umbilical line. She says she feels well, her appetite is good, and she has lost the worn look.

From the beginning of treatment to April 1, she received 125 X-ray treatments, averaging 17½ minutes for each exposure. There were four intervals when treatment was suspended for ten, two, five, and seven days respectively. On a few occasions a slight reddening of the skin over the exposed part was noticed, but aside from that there was nothing but the characteristic bronzing. The increase in leucocytes and the decided increase in both the relative and actual number of myelocytes, together with the increased size of the spleen, noticed March 11, is interesting. A number of the exposures immediately preceding that date had been made with a tube of a lower vacuum, and consequently producing rays of less penetration. This error in technic has, of course, been corrected. Also at this time the patient had considerable mental worry, which had produced sleeplessness. The febrile attack which she had in March was probably a toxemia due either to the absorption of the hyperplastic splenic tissue or to some intercurrent infection.

The urine, which was examined from time to time, presented nothing interesting except a faint trace of albumen.

Case 3. S. H., seen in consultation with Dr. F. W. Simpson of San Francisco. This patient was a male, aged 60, a mechanic, born in Canada. Family history, habits and previous history unimportant.

About fifteen months ago he began to have a tired feeling toward evening, which continued to increase, accompanied by a general weakness. Three months later he began to notice slight edema of the ankles in the evening. About this time he complained of fullness and discomfort in the epigastric region, especially after eating. He next noticed a bronzing of the skin, especially the exposed parts. He was first seen by Dr. Simpson in November, 1903. He was of ordinary stature, medium development, poorly nourished, with dry skin. Temperature 97.8°.

His lungs were normal. Cardiac areas were normal; a hemic basal murmur was present. There was edema of both lower extremities. The abdomen was distended; liver slightly enlarged; spleen enlarged downward, extending through the left hypochondrium into the left lumbar and umbilical regions to within 3¼ cm. of the umbilicus.

Dec. 22, urinalysis showed acid reaction, sp. gr. 1.020, urea, .015%, a trace of albumen, a few hyaline casts, mucus strips, a few white blood cells, and amorphous urates.

Blood examination at the same time showed red cells 2,450,000, hemoglobin 50%, and leucocytes 250,000, of which 51% were polymorphonuclear neutrophils, 4% were small lymphocytes, 3% were large lymphocytes, 38% were myelocytes, and 4% were eosinophiles. A diagnosis of myelogenous leukemia was made, and Bland's pills, with Fowler's solution in increasing doses, was ordered. X-ray treatment was begun on December 7, 1903, commencing with daily exposures of 15 minutes each, gradually increasing to 20 minutes, using a medium high vacuum tube at an average distance of 10½ inches, the rays being confined to the area immediately over and about the spleen. A steady and progressive diminution in the size of the spleen was noticeable from the first. After 36 treatments the organ disappeared beneath the costal arch. Four weeks after treatment was begun a blood examination revealed 3,000,000 red cells, hemoglobin 60%, leucocytes 82,500. Differential: polymorphonuclears 77%, small lymphocytes 2%, large lymphocytes 1%, myelocytes 18%, eosinophiles 2%. Two weeks later (Jan. 17, 1904) the leucocytes had decreased to 52,000, though the actual number of myelocytes remained about the same. At this time the iron and arsenic were stopped, daily exposures of the X-ray being continued. January 31 (two weeks later) the red cells were 3,350,000, hemoglobin 65%, leucocytes 26,000, with polymorphonuclears 56%, small lymphocytes 15%, large lymphocytes 2%, myelocytes 24%, eosinophiles 3%. Urinalysis on the same date revealed no albumen, but a few hyaline casts and amorphous urates. On February 8, treatments were reduced to alternate days because of extreme bronzing and looseness of the skin over the splenic region, and continued so until the end.

Feb. 14, the red cells numbered 3,600,000, hemoglobin 70%, leucocytes 15,000; polymorphonuclears 68%, small lymphocytes 8%, large lymphocytes 2%, myelocytes, 20%, eosinophiles 2%. Two weeks later the blood for the first time failed to show an improvement over the preceding count, the leucocytes numbering 19,000, the relative percentage of myelocytes remaining about the same. X-ray treatments were discontinued on February

20, and the last blood count (March 13) showed 3,600,000 red cells, hemoglobin 80%, leucocytes 12,600; polymorphonuclears 62%, small lymphocytes 20%, large lymphocytes 4%, myelocytes 12%, eosinophiles 2%.

He received in all 61 treatments. After the 36th treatment the spleen disappeared beneath the costal margin, and by the 45th treatment was normal in size and position. The liver had also decreased. He began to improve in his general condition from the beginning of treatment and the edema had entirely disappeared by the fourth week. His appetite has improved, his digestion is good, he sleeps well, and has had a gradual return of his strength. At present time he is able to return to his business, and claims to be stronger than at any time for the last two years.

It will be noticed that in case 3, which is symptomatically cured, and in case 2, which is improved, there has not been a great improvement in the red cells, the last blood count in the former showing 3,600,000, while in case 2 there has been an actual decrease, the red cells at the beginning of treatment numbering 4,200,000, while at the last examination they were only 3,680,000; the hemoglobin ratio has, however, decidedly improved.

The knowledge to be derived from the text books regarding the histogenesis of leucocytes is both fragmentary and misleading. Much confusion has arisen regarding the classification of leucocytes, and, in the light of the most recent investigations, we must discard preconceived ideas to a very large extent. Thus, the conception of the transition from young to old cells through small and large lymphocytes, polymorphonuclear neutrophils, and eosinophiles, must give way in the light of the investigations of Pappenheim, Walz and Grawitz, Michaelis, Wolff, Taylor and others. To enter into a discussion of this work is beyond the confines of this paper, and after all we find these authorities at variance with each other to such an extent that our conception of the pathology of leukemia is for the present hopelessly tangled up. As a result of these investigations, however, the following theories may be presented:

(1) The large mononuclear leucocyte (larger than the large lymphocyte, from which it is further distinguished by having an eccentrically situated, pale, irregularly spheroid or ovoid nucleus, and a relatively large amount of slightly basophilic, non-granular protoplasm) is the mother-cell, ordinarily capable of further differentiation into either the ordinary basophilic cell, or into a neutrophilic myelocyte.

(2) The two forms of leukemia, lymphatic and myelogenous, are closely associated, and are probably forms or stages of the same disease.

(3) Lymphocytes are formed in the lymphoid tissue of the bone marrow, and not exclusively in the lymph glands as formerly supposed.

(4) Myelocytes are formed in the bone marrow, and are the parent cells of the polymorphonuclear neutrophils.

In myelogenous leukemia, myelocytes are cast into the blood circulation, in all probability, because of increased activity of the myeloid tissue of the marrow, which is the only tissue primarily affected in this disease.

Of course this conception of the pathology of the disease under consideration reduces the treatment here advanced to the role of empiricism, because the splenic enlargement is a result of the leukemia, and not the primary lesion. It is contended that this splenic enlargement can be accounted for because of the function of the spleen in its relation to erythrocytic hemolysis. This function has not been proven, however; and besides, we are confronted by the clinical results obtained by Senn, and more recently by Brown, who reports a case of myelogenous leukemia treated by X-ray for eight months with a return of the leucocytes and the spleen to normal. It cannot be argued that this result is due to medication, for Brown's patient, as well as Case 2 of my series, had no arsenic for the greater part of

the time. It would seem, therefore, that the X-ray penetrating the structures of the spleen or other tissue, was capable of producing tissue changes, which alter, temporarily, at least, the symptom-complex of this disease. The effect of the X-ray on the deeper structures, however, being to a great extent unknown, and as we are confronted by difficulties when we come to consider the etiology of the disease, equally as perplexing as those which meet us when considering its pathology, and as we know the tendency of this disease to improve and relapse at times entirely uninfluenced by any form of treatment, the note of warning sounded editorially by the *Journal of the American Medical Association* a week or two ago, is certainly both timely and necessary. Commenting on the cases reported by Senn and Brown, undoubted cases of the myelogenous type of leukemia, apparently cured by this treatment, it urges caution lest we prematurely call these cases permanently cured. On the other hand, we are now utilizing forces heretofore undreamed of, as therapeutic measures. These measures demand critical investigation on the part of the medical profession, and if they are to be kept out of the hands of the quack and charlatan, then scientific men must take them up.

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CONCRETIO-PERICARDII CUM CORDE. (REPORT OF A CASE).*

By GEORGE L. COLE, M. D., Los Angeles.

THE following case, having several interesting features, was referred by Dr. W. H. Bergtold of Denver to Dr. Norman Bridge. In the absence of Dr. Bridge the patient was under my care for a period of three or four weeks, after which, and until the time of his death, he was looked after by us jointly. In referring the case Dr. Bergtold had made a diagnosis of "acute cardiac dilatation of two months' standing, with some improvement, but without complete compensation." After going carefully over the case I concurred in the diagnosis. The patient had been living for many years in Colorado, and much of the time at an altitude of 12,000 feet.

At my first examination, October 28, 1902, the patient, J. T. M., aged 49, gave a history of never having been ill, except a gonorrhea in youth, until two months previously, when at an altitude of 12,000 feet he had an attack of so-called "mountain fever" of a low type with which he had been in bed eighteen days. After the fever he became shortwinded, which was due, as he was told by his physician, to the fact that "the heart was stretched." This evidently was the supposed dilatation referred to. He went to a lower altitude in Colorado, and was much improved, but never wholly free from dyspnea, after which he returned to an altitude of 12,000 feet and became much worse by exercising.

At the time of my examination, October 28, 1902, he complained of severe dyspnea, indigestion and general weakness. His weight was 175 pounds, some twelve pounds above normal. His temperature was 97½; pulse not countable at the wrist; respiration somewhat accelerated and shallow. Physical examination revealed an enlargement of the cardiac area. The heart sounds were very feeble, but with no valvular murmur. The liver was considerably enlarged. The urine was normal in quality and quantity.

The patient was sent to the California Hospital and put to bed for three weeks, during which time he had occasional attacks of dyspnea, with a disturbed

digestion, but was otherwise fairly comfortable, and during this time showed very considerable improvement. During these three weeks there was no elevation of temperature, no cough or expectoration, and several careful examinations of the chest were made without suspicion of tuberculosis. After leaving the hospital he secured quarters with a friend in the suburbs of Los Angeles, and appeared at the office occasionally.

The subsequent history of his case until his death, upon December 18th, was one of increasing dyspnea, with a gradual development of edema of the lower extremities, gradually extending to the lower portion of the trunk and the left pleural cavity. He died a rather distressing death, with the ordinary symptoms of a gradual weakening heart. Albumin and casts became abundant in the urine some time before death.

The following were the postmortem findings as made by Dr. Stanley P. Black:

"The lungs presented small tubercles submiliary in size, scattered throughout cut surface, with occasional areas of old caseation. The pericardial sac was entirely obliterated by adhesions and great thickening. This cicatricial tissue showed microscopically a chronic tuberculosis, with extensive areas of caseation and tubercles surrounding these areas. The heart showed brown atrophy. Liver somewhat enlarged, and on section nutmeg in appearance. Microscopically the typical findings of chronic passive congestion. The spleen showed slight hyperplasia of splenic pulp. Kidneys somewhat enlarged and soft, microscopically showing cloudy swelling and some degeneration of the tubular epithelium."

Diagnosis.—Submiliary tuberculosis of lungs; chronic adhesive pericarditis (tuberculous), (*concretio-pericardii cum corde*); chronic passive congestion of the liver.

Some of the points of interest in the case are as follows: As noticed by the patient, his only illness during life, other than his attack of gonorrhea in youth, was one of eighteen days duration, said to have been "mountain fever," occurring four months previous to his demise. This may have been the pericarditis resulting in complete adhesions. During the three weeks of careful observation while in the hospital, two months after his so-called "mountain fever" and five weeks previous to his death, he had a regular and constant morning temperature of 97.6 degrees, with an evening temperature of 98.4, notwithstanding an active pulmonary tuberculous process. At this time the pulse rate was variable, from 76 to 108, and at times almost inappreciable at the wrist. The heart, while showing brown atrophy at the postmortem, gave the physical signs of cardiac dilatation, with enlarged cardiac area. This was due to the enormously thickened pericardial layers, which were firmly adherent.

DISCUSSION.

Dr. H. G. Brainerd, Los Angeles.—The case reported by Dr. Cole is unlike any I have ever seen. I am not always allowed to make autopsies on some very interesting cases, otherwise I might have found this condition. But as it is, I have never seen anything like it.

Dr. George H. Evans, San Francisco.—These cases are very rare. There is one thing that Dr. Cole did not mention in the clinical history, and that is what can be gained on inspection. I saw quite a number of these cases in a small hospital, and in every instance, on inspection, there is a very prominent transverse wave impulse. These patients have invariably very much enlarged hearts.

Dr. George Blumer, San Francisco.—These cases are very often taken for valvular heart disease. There is a dilatation of the heart, with a relative insufficiency of the valve. A good many of these cases simulate cirrhosis of the liver, so-called pericardial

*Read at the thirty-fourth annual meeting of the State Society, Paso Robles, April 19-21, 1904.

cirrhosis. In quite a number of cases of adherent pericardium there is associated with the pericardium a decided thickening of the peritoneum, especially over the liver, and recurrent attacks of ascites are not uncommon. Some cases are tapped over one hundred times. I remember one case tapped 170 or 180 times before death. After death this condition was found.

ON THE SUBJECT OF TENDON TRANSPLANTATION, WITH REPORT OF A CASE.*

By S. J. HUNKIN, M. D., San Francisco.

SOME one and a half years ago I had the honor to read a paper before this society, dealing with the subject of tendon transplantation, in which I made sundry remarks that I expected would provoke criticism, but which fell unnoticed or unheeded. Added experience impels me now to reiterate some of those statements, which I deem worthy of your attention. At that time I also maintained a position on the technic of tendon work which I find is not tenable, and which I now desire to retract. I shall be content, however, to note especially a single instance of each character, although several such will be found upon comparison. Reading from my previous paper, I quote:

It can now also be accepted beyond question that a muscle can be trained (after transplantation) to differentiate its action (that is, its manifestation of power), and will single out the required applications of its force, in response to cerebral impulse; readily so, when the new action is more or less co-ordinate to its normal function, but still definitely so when the special action is different to, or opposite to, its power as previously expressed or exerted.

If this statement is true, and I believe it is capable of ready demonstration, then the function of muscle is somewhat different from what I, at least, had hitherto understood; muscles appear flexors or extensors only because of their positions, that is, because the brain can use them best as extensors or flexors in the anatomical positions they occupy, but they can also be used in any other movement the brain desires, and the mechanical position allows. They are not flexors or extensors in themselves, but are rather humble instruments within the brain control, and aids in accomplishing cerebral design; trained and used as flexors or extensors, perhaps, because of their positional mechanical efficiency, but capable, especially if their insertion is altered, of serving the brain in any manner required which the mechanics permit. To repeat, if a muscle whose contraction has always flexed a joint is later transferred so that now when it contracts the consequent shortening extends the joint, it does not necessarily contract in response to the flex impulse in its new mechanical relation, as one would suppose, but it contracts and performs the function called by the cerebral thought. When one desires extension, one does not need to think flex in order to get the desired impulse, but simply decides to move the joint toward extension, and the muscle contracts and performs the movement.

The boy whom I present this evening is 10 years of age, and came to me the latter part of October, 1903, with poliomyelitis paralysis of seven years' standing. The right leg, while markedly paretic, was of considerable use, and so far, except an arthrodesis at the ankle joint, which was not very successful, nothing has been done for it. The paralysis in the left extremity, however, was extreme, and the limb of no practical use; the only movement possible with the child, lying or sitting, was a slight rocking motion from the hip, while in the standing position the limb dangled. On examination there is no quadriceps. Posteriorly, both internal and external hamstrings are alive but paretic; adductor group apparently dead, but some little adduction possible from the abducted

position, apparently from the internal hamstrings. A little rocking motion is possible, but I cannot decide whether the tensor vaginae femoris or the psoas are alive or not. No muscle is alive in the leg, although there is some slight movement in the toes, from the intrinsic foot muscles.

Operation, November 2d. The biceps on the outer side and the semi-membranosus, and semi-tendonosus, on the inner side were exposed, isolated, severed close to their insertions, and freed well up to the middle of the thigh; then a strong silk suture was fastened in the tendons by the method of Lange; the silk threads were then brought forward sub-cutaneously to the middle line, just over the insertion of the quadriceps into the patella; the silk from both sides was knotted together over the tendon, and passed again sub-cutaneously to the middle line just over the tubercle of the tibia and fastened with a clove hitch into the periosteum of the tibia. The method of Lange was followed rather closely, except in the grip of the periosteum, as I preferred the clove hitch for that purpose as safer and giving much less danger of knot decubitus than any ordinary suture. The wounds, of course, were closed in the usual manner, and the leg placed in a plaster of paris splint. There was also an arthrodesis made between the outer under surface of the astragalus and the os calcis. To my great surprise, within a few days the boy could lift the leg into a position perpendicular from the plane of the bed, in the splint, and a few days later was able to perform the same maneuver without any support; he was walking with the aid of a pair of caliper splints in six weeks, and has since got around without any particular difficulty. At present, all ordinary movements of locomotion can be made; he can flex the hip and extend it, and can both flex and extend the knee; he can both abduct and adduct the thigh, and can rotate it inward and outward. So far I have not permitted the knee flexion more than about 20 degrees, feeling strongly that it would be unwise for the present to allow the acting extensors to be overstretched. It is true, of course, that the movement strength is quite small, and yet it is enough to enable the boy to maintain an erect position and get around. It is amazing what slight power is apparently sufficient in these cases to allow of bipedal locomotion. I did a similar operation some two years ago on a man with quadriceps paralysis, following a fall in an elevator shaft. This was done by direct tendon-to-tendon suture, and was found rather difficult, by reason of the shortness of the tendons. Some infection followed, probably due to the amount of tension that was necessary, so that it was several weeks before I deemed it safe to permit of voluntary attempts at motion. However, extension was possible as soon as the trial was made. At the present time, without being able to accurately measure the power, I should estimate that it is about equal on both sides.

A third patient has had this operation made by me after Lange's method, apparently satisfactorily, but the child, while still in splints, was taken from the hospital to the country by the mother, and we have lost track of it. What I desire to emphasize especially is that in these cases the muscles readily adopted new functions in response to the cerebral impulse without any long period of training, even when the new role was opposite to the former, and this without any confusion of the brain or mix-up of the muscles. In my former paper I also said: "It (a muscle) will, in response to steady methodical training, and definite, steadily repeated cerebral impulses, develop two separate and distinct actions; that is, be at the same time both a flexor and an extensor." A dear friend of mine and a strictly scientific observer, said in answer to this statement, that "it is unthinkable." I feel, however, very positive that I have observed marked differentiation of action in two or three instances in the tibialis anticus, and I believe also in

*Read before the San Francisco County Medical Society, April 12, 1904.

the peroneals. In a recent paper by Lange of Munich, he states that such differentiation can be expected in the tibialis anticus, although he doubts its occurrence in other muscles; but it is hardly reasonable to suppose that if the independence of action will occur in one muscle that it will not in another. Really this segregation of function should not be hard to believe; for perfectly analogous actions are normal, in some muscles. Take the deltoid, for instance, which is primarily an extensor or abductor of the arm, but is also quite an important muscle in pulling the arm forward as well as backward, and is, too, an inward and an outward rotator. If a muscle can have two dissimilar actions, due to the spread of its original attachment (and if so, this admits that it must differentiate its contraction and relaxation, through its various bundles of fibers), then one can understand how it may gain varied actions as a result of the similar independence of contraction of the different bundles of fibers when the insertion is split or divergent.

There must be in all cases a certain amount of independence of contraction and a certain accommodation in the bundles of fibers; differentiation of the different parts of the muscle is essential in order that the muscle as a whole can accommodate itself to the ordinary positions of a joint in its varied compound movements and secure any delicacy of touch and any sureness of motion; and if this is so, depending upon variant origin, it seems it will necessarily be so, as a result of its divergent or multiple insertion. Surely the child before you, whom you note uses his normal leg-flexors as leg-extensors, as abductors and as adductors, the brain holding these muscles in such even balance as to permit of their being used as rotators—surely this child considers it practicable even if “unthinkable.” One must guard against self-deception in these cases, for to deceive oneself is not hard; hence, in many cases, one does not speak positively of just what amount of power remains in any particular muscle before the operation, nor exactly by what especial muscular action it is accomplished afterward. The methods of the physician are difficult to demonstrate, and the reaction of degeneration is hard to obtain in a scared, nervous child, who tells nothing, squirms and fights with all his might, and only yearns to be let alone. And again, perhaps there is really no *normal muscle* in the limb; some paralytic, and others more or less paretic, contracted or overstretched. Self-deception, then, is quite a possibility, and the terms “it seems” and “it appears” must often be used instead of greatly desired more accurate language. What power remains in a muscle is estimated by a close observation of the movements made chiefly by the child in getting away from you, and these voluntary motions are repeated and repeated, aided and directed by you with slight pin pricks, by tickling the soles of the feet, and in various ways attempting to note all of the live muscles in this crude, although fairly effective manner.

I shall not attempt to discuss the character of the transplantation, with reference to the extent of paralyses; that must be decided by one's mechanical as well as one's anatomical equation, and I refer those who desire further information to the paper of Lange, before mentioned, and to a new work by Vulpus, which I had the pleasure of discussing with him a few months ago, and which his assistant now writes me is being translated by Beck of New York. This monograph goes exhaustively into the anatomy, history, physiological and mechanical relations involved and the many plans for operation proposed. I shall content myself by stating that the simple operations are the better, and the transferring of muscles as a whole is to be preferred to their splitting whenever possible. The fewer divisions of units of power that enter into the problem the easier the calculation and

the better the result can be foreshadowed. How the tendons can be best fixed in the new points of power brings me to that part of my earlier paper that I desire to modify. In practically all writings on the subject of tendon work you will see described numerous ways of suturing; papers will be filled with diagrams and blackboards covered with carefully prepared “Chinese puzzle”—locking criss-crossings of how tendon suturing should be done; I had done almost all of them, and told you of those I deemed the best. Now I have no doubt these diagrams are all right, and will work beautifully as described, when the work is done on dogs, or on accidentally divided tendons; but no fellow wants to mix up normal tendons in such a manner. I regret to say that, in some of my earlier work, I have subsequently seen the tendons pull or stretch out, and I have had to do it over again. It is written, “A wise man does not put new wine into old bottles,” and I suggest, from experience, that it is not the part of wisdom to suture the tendon of a more or less healthy muscle into or unto the weak or atrophied tendon of a paralytic muscle. It is bad surgery to plan, and bad mechanics to have accomplished, the fixing of a tendon so that the force of a muscle is to be exerted through a tissue that can and will stretch; and paralytic, shrunken, withered tendons may yield and render your work futile. The insertion of transplanted tendons is to be made, whenever possible, into the periosteum, or into the bone, at the desired site; then if the anatomy and mechanics are correct, a good result can be confidently expected. When the tendon will not reach the desired point of insertion, it is neither necessary nor advisable to split and reverse the tendon nor to make any accordion-pleating incisions to increase the tendon length; but a silk tendon, placed after Lange's method, can be depended upon to secure the proper length.

When I was in Munich, by the courtesy of Professor Lange I saw many of the original cases wearing silk tendons, which were thoroughly efficient after many years; and Professor Lange showed me two specimens of such tendons which he had the opportunity of removing after they had been *in situ* two and three years, and in which microscopically true tendon tissue was found not only around but also closely interwoven with the silk fiber. I have since placed the silk tendon, in this manner, several times with great satisfaction, and in the patient before you this evening there are at least five inches serving as a tendon. This is steadily increasing in size, and can be readily felt with the finger, about as large as a small lead pencil.

[For discussion see JOURNAL of May, 1904, page 168.]

Medical Staff on the Isthmus.—Colonel Gorgas, chief sanitary officer of the isthmus, will be sending out a call before a great while for physicians to enlist in the Government service for duty there during the completion of the canal. As there will be some 50,000 men employed on the work, it is believed that at least 300 physicians will be required to look after their health. *American Medicine* says: “The higher positions will be allotted to the Government surgeons. Young and active physicians are needed, tough, wiry, hardy fellows, who are not afraid to rough it. There will be a preference shown to those just graduated from hospitals.”

Germs of Typhoid.—According to Schuder's table of 650 cases of epidemic typhoid fever, in 70 per cent the vehicle of the disease was water, in 17 per cent milk, in 3½ per cent foods of all kinds, and in 9½ per cent other factors. It is quite certain, therefore, that in 87 per cent of cases the infecting organism reaches patients through the water or milk which they drink. —*Canadian Journal of Medicine and Surgery.*

INTESTINAL OBSTRUCTION—WITH REPORT OF THREE UNUSUAL CASES.*

By CHARLES D. LOCKWOOD, M. D., Los Angeles.

THE FATE of a patient suffering from acute intestinal obstruction is largely determined in the first forty-eight hours, and it rests with the physician who first sees the case. Early diagnosis and prompt surgical intervention offer the only hope of a successful issue in the majority of cases. Unfortunately the diagnosis, both as to the nature and location of the obstruction, presents great difficulties. For this reason, if the mere fact of obstruction, or a reasonable probability of its existence can be established, exploratory operation under modern aseptic conditions is imperatively indicated.

Thus far the statistics of acute intestinal obstruction, other than that due to strangulated hernia, do not add luster to the brilliancy of surgical achievement. Gibson (*Annals of Surgery*, October, 1900) has collected 1,000 cases of acute intestinal obstruction operated upon since 1888. These give us a fair basis upon which to estimate the mortality under modern conditions. The cases are classified as follows: Hernia, 354; intussusception, 187; bands, 186; volvulus, 121; Meckel's diverticulum, 42; gall stones, 40; openings, 34; foreign body, 16; miscellaneous, 20.

The mortality of the hernia cases was 34 per cent; that of the cases due to other causes, 47 per cent. The highest mortality was in those cases due to Meckel's diverticulum and openings. Of the former, 42 cases, with a mortality of 62 per cent; of the latter, 20 cases, with the same mortality. Of the six cases due to diaphragmatic hernia, all died.

This showing does not seem to me encouraging when we remember that the cause is always a mechanical one, and if promptly recognized and relieved, practically all patients might recover. However, this fault does not lie at the door of the surgeon, for too often he sees the patient *in extremis*, and reluctantly operates as a *dernier resort*, often hastening the fatal issue.

The general practitioner must bear the burden of blame, for the majority of these patients are first seen by him. Many times the first few precious hours, when surgical treatment offers almost certain relief, are wasted in vain attempts to relieve by medicines when they would better be spent in establishing a diagnosis and preparing the mind of the patient for operation. Early diagnosis of probable obstruction is possible in the majority of instances. As the most valuable aids to this, I would mention the following in the order of their importance:

1. A rising leukocyte count. This has proven a most valuable aid in all of my cases. A leukocytosis, ranging from 15,000 to 30,000, without other inflammatory conditions to explain it, is strongly suggestive of obstruction.

2. The history of the case. Nearly 70 per cent of patients with acute obstruction will give a history of past inflammatory conditions, commonly giving rise to adhesions.

3. Pain and reflex vomiting, with slight fever. The pain is cramplike and intermittent in character. There is no well-localized tenderness. The vomiting is due to the shock of incarceration, and not that due to mechanical interference.

Of later and unmistakable signs I shall not speak. Within the last year I have operated upon seven patients with acute intestinal obstruction. Four of these were due to strangulated femoral hernia. All of these patients with hernia recovered, and are not considered in this paper. The other three cases I shall report in some detail:

Case 1—Mr. S., age about 35, suddenly seized with severe pain in the right inguinal region while on train coming from the East. This pain continued for the last

five hours of his journey, accompanied by much nausea and vomiting. On his arrival Friday he consulted Dr. A. T. Newcombe, of Pasadena, who diagnosed appendicitis, and advised operation. Operation refused until Monday at 11 A. M., when I saw him. There was marked tenderness over McBurney's point, and some complaint of pain in the left hypochondrium. Temperature 100 degrees Fahrenheit. Slight nausea and occasional vomiting. Through a McBurney incision a long club-shaped appendix was removed. It was very firmly bound down to the posterior abdominal wall by fresh adhesions. For two days following operation patient did well. He had less pain in the region of the appendix, and was less tender there. Vomiting, however, continued, and it was impossible to get a satisfactory bowel movement. The fifth day after operation tympanites developed, pulse became rapid and weak, vomitus slightly fecal. Abdomen was hastily reopened and site of obstruction sought for. Small intestines greatly distended to ileo-cecal valve. Site of operation clean and nicely healed. Condition grew so bad it was impossible to continue operation. Abdomen hastily closed, and patient returned to bed. Two hours later he died. Autopsy revealed a strangulated hernia of the diaphragm. The splenic flexure of the colon had been forced through an old stab wound in the diaphragm, kept open by adherent omentum, most of which was in the pleural cavity. Strangulation in this case was a sequence of appendicitis. The retching consequent upon appendicitis had forced the loop of gut through the diaphragm. Failure to make a diagnosis was due to ignorance of the history. The attending physician had obtained the history of a stab wound, but did not call my attention to it, and I failed to elicit it. It may be said in extenuation that of 300 reported cases of diaphragmatic hernia but seven have been diagnosed antemortem.

Case 2—Mr. F. K., farmer, age 45. I saw this patient first at 4 A. M. He was complaining of severe abdominal pain, chiefly in the right inguinal region. He had been suffering some pain for two days, but it had been much more severe, cramplike and intermittent in character for twelve hours preceding my first visit. Patient gave a history of stomach trouble for several years. Five years ago he had an attack somewhat similar to the present one. There was tenderness over the entire abdomen, but most marked over McBurney's point. Temperature ranged from 99 to 101 degrees; pulse, 80 to 100. At this time this case was very perplexing to me. It had many of the characteristics of appendicitis, and yet it was not typical. I made a diagnosis of appendicitis, and urged immediate operation. This was refused, but patient was removed to the hospital, where I could watch him more closely. Twelve hours after I saw him a blood examination was made. The leukocyte count was 22,000. Widal reaction negative. There was beginning tympanites, but no vomiting. The leukocytosis and tympanites led me to suspect obstruction, as it seemed too early for an appendiceal abscess. I had Dr. H. B. Stehman see the patient with me at this time, and he agreed as to the possibility of obstruction. Together we urged the man to have an operation, but he persistently refused. Five days from the beginning of the attack obstruction became complete. There was fecal vomiting and great tympanites. Operation was then consented to. A large appendiceal abscess was opened and drained, but patient's condition became so critical that it was impossible to search for the cause of obstruction. After thorough gastric lavage the patient was returned to bed. He was somewhat relieved after operation, but increasing tympanites and shock ended in death in thirty-six hours. Postmortem showed an acutely inflamed appendix, retrocecal and firmly adherent. The small intestines occupying the right half of the abdominal cavity were adherent one to the other, and covered with fibrinous exudate. On the convex border of the ileum, about eighteen inches from the ileo-cecal valve, was a Meckle's diverticulum, the tip of which was fastened by fresh adhesions to the parietal peritoneum near the median line. Under this adherent diverticulum was a strangulated loop of ileum. The gut at the point of constriction was gangrenous; above this point it was greatly distended; below it, collapsed. The diverticulum was larger than the normal lumen of the gut. Its length was about 9 cc. It seemed to have all the coats of the normal gut, was free from fat, and had no mesentery. There were no inflammatory changes except at its tip, where a thick layer of fibrinous exudate glued it firmly to the parietal peritoneum. The ileum at the point where the diverticulum was given off was constricted.

This case emphasizes another important complication of appendicitis. This Meckel's diverticulum had evidently been carried into the infected appendiceal area by a floating loop of intestine. Its tip bathed in pus and septic exudate was again carried by the freely movable small intestine to the median line of the abdomen, where it became adherent and formed a constricting band.

It is probable that this source of obstruction did not become operative until the second day of the

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appendicular infection, when violent symptoms and marked leukocytosis appeared. This patient might easily have been saved had he consented to operation even on the second or third day of the attack.

Case 3—Mrs. B., a Spanish lady, age 40. I saw this patient in consultation with Dr. Ross Moore of Los Angeles. She was complaining of severe abdominal pain, and it had been impossible to secure a bowel movement by repeated enemas. There was great tympanites, general abdominal tenderness, and on the right side below the umbilicus a mass could be mapped out which felt like a tumor. This could also be outlined bimanually through the vagina. Pulse was 140; temperature, 99 degrees; leukocyte count, 18,000. The woman looked very sick. A diagnosis of intestinal obstruction was made and concurred in by Dr. George Lasher. An immediate operation was done. On opening the abdomen in the median line below the umbilicus a large amount of dark, bloody fluid escaped. A loop of gut which seemed to be compressed by a mesenteric band was freed. This loop and one or two adjacent loops were black and gangrenous. The patient's condition was so bad that a radical operation seemed unwise. A fecal fistula was hastily made in one of the blackened loops, and the abdomen closed. No hope of this patient's recovery was entertained, but twenty-four hours after operation her condition was improved, and there was a free escape of gas and bloody, dark fluid. After this there was gradual improvement until the fourth day, when gas ceased to pass through the artificial opening. Temperature began to rise; there was a slight quickening of the pulse and well-defined tympany above the wound. I decided to open the abdomen again and attempt removal of the gangrenous gut. This seemed very hazardous, as the patient was extremely weak, and had taken little food for a week. However, it was the only alternative, and on the fifth day after the first operation forty-four inches of gangrenous gut was removed, restoring the intestinal lumen with a Murphy button, re-enforced by Lembert sutures. The obstruction was found to be due to a heavy band of adhesion, the result of a previous peritonitis following abortion. The abdomen was closed with gauze drainage. Gas and liquid feces passed freely by rectum for three days, when a fecal fistula developed and most of the feces escaped through the abdominal wound. On the ninth day after operation the Murphy button was removed through the abdominal wound. The patient has steadily improved to the present time, but her abdominal wound is still open, and she has a small fecal fistula. The ultimate fate of this patient is yet uncertain, but the chances are that she will recover after a third operation to close the fistula and abdomen. In this case all of the data was present for an early diagnosis, and this was made by her attending physician. She had a leukocytosis of 18,000. There was a history of peritonitis. The attack came on suddenly with severe cramp-like pain and vomiting. In the very comprehensive article by Gibson, referred to earlier in my paper, no mention is made of the time elapsing between the onset of symptoms and operation. This I believe is the most important factor influencing mortality, and if improvement is to be made it must come through earlier operation, rather than improvement in technique.

DISCUSSION.

Dr. W. I. Terry, San Francisco.—Dr. Lockwood spoke about the length of the resected bowel. I saw Kocker operate on a strangulated hernia where he resected ten feet of intestine. I know of one case where thirteen feet were taken out.

Dr. C. W. Murphy, Los Angeles.—I emphasize what Dr. Lockwood has said about early operation. I was called at 3 o'clock one morning to see an old gentleman who was vomiting, who had typical symptoms. The symptoms had come on a few hours before I got there. He wished to be operated upon, consulted his relatives, but did not arrive until 11 o'clock. About five minutes after he was dead. He had his obstruction in less than twelve hours. In regard to the operative procedures, it is best to have a definite plan, so that the operation can be performed rapidly. When the abdomen is opened, if the point of obstruction does not show immediately, examine the natural opening, the femoral and inguinal glands and the umbilicus, because a very small hernia of only a small portion, so small it cannot be discovered, may be enough to cause intestinal obstruction. One retroperitoneal hernia which occurred in a patient who had prolonged suffering, when the obstruction came on we concluded it was not necessary to operate; did not know where the obstruction was. A couple of weeks ago I was called to see a patient who

gave the history of repeated attacks of gall stones. This patient had had obstruction for forty-eight hours. At the operation we found a large stone in the ilium which had produced obstruction. Whether or no it was a gall stone I cannot say.

SURGICAL ANATOMY OF THE INGUINAL CANAL.*

By CLAUDE W. MURPHY, M. D., Los Angeles.

THE SUCCESS of operations for inguinal hernia depends on thorough asepsis, the use of proper suture material and a correct knowledge of the surgical anatomy of the inguinal canal.

Under the skin in the inguinal region is found the superficial fascia, which varies much in thickness in different individuals. There is no deep fascia. When surgeons speak of the necessity of approximating the edges of the deep fascia in a wound of the abdominal wall they mean the aponeuroses of the lateral abdominal muscles. Approximation of fascial wounds is to prevent dead spaces for the accumulation of blood clots. Approximation of the edges of aponeurotic wounds is to prevent the muscles from drawing the wound lips apart, thus avoiding a hernia.

The front wall of the inguinal canal is the aponeurosis of the external oblique; approximately the outer half of the back wall is only the transversalis fascia, while the inner half is also the internal oblique and transversalis muscles. Poupart's ligament, which is a thickening of the external oblique between the anterior superior spinous process of the ileum and the spines of the pubes, is the floor. The roof is composed of the fibers of the internal oblique and transversalis, which arise from Poupart's ligament, and pass first inward and then downward, to be attached to the crest of the pubes and the ileopectineal line for half an inch, forming the conjoined tendon.

The internal ring is half an inch above the middle of Poupart's ligament. It is the point where the testicle in its descent pushes the transversalis fascia down with it to form one of its coverings. The external ring is a triangular opening, above and to the outside of the crest of the pubes. It is the place where the testicle pushes forward the external oblique's aponeurosis to form one of its coverings.

In operating for hernia, the incision through the skin and fascia should extend from a short distance beyond the internal ring to the upper end of the scrotum. To open up the inguinal canal quickly, neatly and with as little injury to the tissues as possible, lift up the aponeurosis of the external oblique at the outer part of the wound, with two dissecting forceps; make an incision between the forceps large enough to admit the index finger; pass the finger into the canal and out through the external ring. Pass one blade of a scissors on the finger, and with one cut upon the whole canal. Enough aponeurosis of the external oblique must be left attached to Poupart's ligament so that when the deep surface of Poupart's ligament is sewed to the conjoined tendon there will be space enough to sew up the slit in the external oblique. If the conjoined tendon is too weak, then the outer edge of the rectus must be brought in contact with Poupart's ligament.

For a number of years I have examined in my anatomical work the inguinal canals of female cadavers. I have never failed to find, when the canal was opened, the round ligament. This is always well developed at the internal ring. From this autopsy experience, and from a few Alexander operations I have performed, it seems that, where there are no adhesions, shortening of the round ligaments is the operation for retroversion. The operation, after the uterus is elevated by traction on the round ligaments, is the same as a double Bassini for inguinal hernia,

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with the addition that the round ligament is included in the ligatures that approximate Poupart's ligament and the conjoined tendon.

The ilio-inguinal nerve must not be included in or pressed on by sutures used in operative work in the inguinal canal.

The cremasteric and the infundibuliform fasciae are so thin and so intimately adherent to the hernial sac that they can almost be considered, from a surgical standpoint, a part of the hernial sac.

[For discussion see JOURNAL, May, page 161.]

URETERO-CYSTOSTOMY, WITH REPORT OF CASE.*

By J. HENRY BARBAT, M. D., San Francisco.

THE implantation of the ureter into the bladder is an operation which has been practiced since 1877, the first recorded operation being done by Tauffer. Up to the present time there have been about 120 cases recorded, with a mortality of 6 per cent. About 20 per cent of these cases were due to vaginal hysterectomies, 10 per cent were congenital, 10 per cent followed labor, with or without forceps, and the rest resulted from severing the ureter accidentally or intentionally during the course of abdominal sections. However caused, severance of the ureter in the lower part of its course requires its implantation into the bladder, because it is impossible to do a uretero-ureteral anastomosis in the deep portion of the pelvis. In a number of cases in which uretero vaginal fistulae existed it has been found possible to turn the cut end of the ureter into the base of the bladder by working through the vagina, first making a vesico-vaginal fistula and then dissecting a flap of vagina around one side of the cut end of the ureter, turning it into the incision in the bladder and suturing it in position. In most of the cases reported good results were obtained, and the method is to be commended whenever feasible.

In a large number of cases it will be found impracticable to work by the vaginal route, and in these cases it will be found necessary to open the abdomen, search for the ureter and implant it into the bladder. Several methods have been suggested and employed with success, the majority of the patients being restored to a condition of comfort so far as the ureter and bladder were concerned, and cystoscopic examinations subsequent to the operations showed the ureters to be patulous.

I believe the unusually large proportion of reported successful cases is due to the fact that many men report only their successes, in order not to injure their records. The only unsuccessful cases reported are by the most expert operators with a vast amount of clinical material at their disposal. I mention this because I know of unreported cases; the patients have been operated upon without success, and still have their uretero-vaginal fistulae.

In uretero-cystostomy the technic must be simple, must not occupy too much time, and the ureter must be so implanted that there will be little probability of its cut end contracting or of any leaking at the site of the implantation. Contraction of the end of the ureter can be prevented by splitting it in two flaps, as suggested by Paoli, Busacchi, Kelly, Baldy and others. Leakage at the site of anastomosis must be prevented, first by making the opening in the bladder no larger than necessary to allow the ureter to be drawn through without force; second by fixing the end of the ureter into the bladder wall in such a manner that there will be little or no tension on the sutures which cover the ureter with peritoneum.

After a number of operations on dogs, the following technic was adopted as the most satisfactory in every way: After the abdomen is opened the ureter is

sought for and tied as near to the bladder as possible, and then cut on the proximal side of the ligature. Care must be taken to not separate the ureter for too great a distance from the surrounding tissues, otherwise its blood supply will be jeopardized. A long silver probe or a uterine sound is passed into the bladder through the urethra, and pushed as far as possible toward the cut end of the ureter. This shows us the part of the bladder which will approach the nearest to the ureter, and thereby avoid tension after union. When the exact point is noted, the sound is withdrawn for one centimeter and a half, so that the opening in the mucosa will come that distance farther toward the pubes in the wall of the bladder. This enables us to cover over the lower part of the ureter with a layer of peritoneum from the bladder without having too much tension. I mention this point especially, because if the opening in the mucosa is made at the highest point of the bladder, it will be found difficult to make a collar of peritoneum to envelop the lower end of the ureter without making undue traction on it.

A small incision is carefully made on the tip of the sound down to the mucus membrane of the bladder, which is to be picked up with fine mouse-toothed forceps before it is cut, in order to prevent it from retracting beyond the margin of the puncture. A fine intestinal needle, threaded with chromicized catgut, is now passed through the bladder wall from without in at a point a trifle over one centimeter from the edge of the cut in the bladder, and a little to one side of a line perpendicular to the center of the incision. The needle is brought out through the cut, and is now passed through one of the flaps of the ureter from without in, close to one corner, then back through the other corner from within out. One motion is usually sufficient to pass the needle through the ureter twice. I now pass the needle into the bladder through the cut, being careful to avoid catching the mucus membrane on the point, making it emerge at a point corresponding to the point of beginning. Care must be taken in making this last move to see that the point of the needle enters the mucosa directly under its point of emergence, as it is very easy to start it obliquely at a point close to the margin of the incision, and this would be fatal to the proper completion of the operation.

The threads are left long, and a stitch is taken on the other side of the cut with another needle in exactly the same manner, being careful not to get the threads crossed at the opening in the bladder. When both sutures are placed, both ends of both sutures are pulled on simultaneously and the ureteral flaps are drawn into the bladder; when the threads are tied, the outer side of the ureteral flaps are in contact with the mucus membrane of the bladder, and the top of the slit in the ureter is well inside of the bladder. The peritoneum covering the bladder is now slit for one and a half centimeters, just behind the ureter, and the cut edges drawn over the lower end and sutured with fine catgut, picking up a small bite of the ureteral wall without perforating its lumen. Three such stitches are sufficient. Great care must be observed in placing these sutures to avoid making too much pressure on the ureter; this may be prevented by picking up only peritoneum, which, being somewhat loose, will easily give, and thereby avert obstruction.

If any tension exists at the point of anastomosis, the best way to relieve it is to take a number of anchor sutures, beginning at some distance from the insertion of the ureter into the bladder, and working down to it. The sutures should be taken in both ureter and bladder, and so placed that each suture takes up a little of the tension. There must be no tension on the sutures which hold the peritoneum over the lower end of the ureter at its junction with the bladder, or there will be danger of leakage.

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Cases will be met with in which the ureter and bladder cannot be brought together without undue traction, and will demand good judgment and skill to surmount the difficulty. In one case Howard Kelly loosened the bladder from its anterior attachments, and in that way gained three centimeters. Loosening the kidney from its bed will also give about three or four centimeters, and if necessary both procedures might be resorted to, thereby obtaining an approximation of from six to seven centimeters. If this is not sufficient, we must resort to the more difficult and serious operation of using a piece of isolated intestine to bridge over the gap between the ureter and the bladder, as advised and done experimentally by Fabri, D'Urso and myself.

The following patient was operated upon on account of a uretero-vaginal fistula following vaginal hysterectomy:

Mrs. R., aged 28 years, nullipara, had noticed a lump in the left lower abdomen for several months, which appeared and disappeared without any apparent reason, but did not cause any pain.

In September, 1903, while on a visit to Portland, she was taken suddenly sick with chills and fever and violent pain in the lower abdomen. The physician who saw her made a diagnosis of pus tube and fibroid tumors of the uterus. The patient was removed to the hospital and operated upon. Several pus sacs were said to have been evacuated, and the uterus removed per vaginam on account of two small fibroids. Six days after the hysterectomy which was done with clamps, fecal matter began to pass per vaginam, and continued for ten days, when it almost stopped; but urine began to flow at about that time, and continued to do so until the time I operated on her, November 14, 1903.

Examination made the day before operation showed two large fluctuating masses in the pelvis, the left one being larger than the right, neither being very tender to the touch. Vaginal examination disclosed the absence of the cervix, and on the left side of the vault a small opening about two centimeters deep, funnel-shaped and bleeding on being touched. Urine was seen flowing from the bottom of the cavity. Attempts to pass fine bougies or ureteral catheters were futile, and only provoked bleeding and caused pain. On the posterior vaginal wall at the margin of the wound was a small papilla, beneath which a fine probe could be passed into the rectum. Cystoscopic examination showed urine flowing from the right ureter, but none from the left, and a ureteral sound could be passed only for a distance of one centimeter into the left ureteral orifice. The bladder at the site of the left ureter was pulled toward the back and left side, undoubtedly by cicatricial contraction. The urine collected from the vagina for one hour measured one ounce, and the same amount was drawn from the bladder during the same time. The patient had been taking hexamethylene tetramine for four days, and urine passed from the vagina one hour after the administration of a formalin douche 1-1000 showed no bacteria either by culture or centrifuge, so I concluded that there was as yet no ascending infection. This was remarkable on account of the fact that, even though fecal matter did not pass through the rectal fistula, gas did; and colored solutions injected into the vagina passed into the rectum, showing a valve-like arrangement at the recto-vaginal fistula. This fact made it impracticable to attempt any operation through the vagina; and further, the large masses in the pelvis were better attacked through the abdomen.

The operation was done just two months from the first one. The abdomen was opened in the median line, and it was seen at a glance that the masses were ovarian in character, because the tubes were both intact and lay on top of the tumors. The left one was firmly adherent, and every time an adhesion was separated a pus sac was opened, and near the bottom of the pelvis a small cyst was broken into. Great difficulty was experienced in separating the mass from the cicatricial tissue left from the previous operation, and some of the sac wall had to be left in.

The tumor on the right side was a cyst as large as the fist, and was easily removed. The tissues of the pelvis which were in contact with the tumor of the left side were thoroughly wiped with pads wrung out of formalin solution 1-1000. Search was then made for the left ureter, which proved somewhat deceptive on account of its large size, looking more like the external iliac vein than a ureter, and it was only after finding the vessels a little on one side that I felt sure of the ureter. It was fully one centimeter in diameter. It was dissected down as far as possible without opening the vagina, and a ligature placed at the lowest point. The ureter was cut just above the ligature, and implanted into the bladder in the manner previously described.

There was very little tension at the point of anastomosis and no anchor sutures were required. The abdomen was

closed without drainage, and the patient put to bed, with the head of the bed elevated eighteen inches. A catheter was kept in the bladder for forty-eight hours, the urine being slightly bloody during that period. After that time it discommoded the patient so much that I withdrew it, and ordered the patient to be catheterized every three hours. She felt able to pass water without assistance, however, and was allowed to do so. The amount of urine passed rapidly reached normal, and even exceeded it, and was passed without difficulty, with the exception that the patient felt slight pain at the end of micturition, at a spot corresponding to the point of anastomosis. No bacteria were found at any time subsequent to the operation.

The recto-vaginal fistula was closed at a subsequent operation, and the patient is at the present time in the full enjoyment of perfect health.

Cystoscopic examination two months after implantation of the ureter showed a small dimple at the point of insertion, from which urine could be seen flowing. The ureteral orifice was rather small, barely admitting the tip of a Kelly searcher, but evidently sufficiently patulous to allow the urine to enter the bladder without any obstruction.

The ureteral flaps were not discernable, and this is in accord with my experimental work, which has shown in every instance that the flaps either unite so closely with the bladder wall as to be invisible or else the ureter pulls them up along with the wall, leaving only a dimple to be seen after the lapse of a few months.

[For discussion see May JOURNAL, page 162.]

EXTRACTS FROM RECENT LITERATURE ON FOURTH OF JULY TETANUS.*

By FRANCES LOUISE NEWTON, M. D., Woodland.

I HAVE, from my earliest recollections, been interested in tetanus. The children that I knew warned each other against stepping on a rusty nail for fear of lockjaw, just as they taught each other the kinds of mushrooms that were poisonous and those that were edible. My interest has been much increased within the past year by the numerous articles that have appeared in the medical journals upon the subject, especially *The Journal of the American Medical Association*, whose attention was attracted by the appalling loss of life through the celebration of the Fourth of July recorded in the daily papers throughout the country. Warnings were not wanting, for the newspapers retold the experiences of previous years; how many lives were lost through accidents of the Fourth, and how many more had succumbed to the tetanus epidemic that follows in its train. Parents were warned both of the dangers in the use of toy pistols and the necessity of the proper care of the wounds that they might produce. The responsibility of municipal authorities was pointed out. Attention was called to innumerable ordinances controlling the sale of toy pistols to minors and the discharge of firearms within the city limits of the municipality. Assertions were made that if existing laws were enforced by the police, the events of preceding years could be modified, if not eliminated.

Nor has the public alone been warned. Hardly a medical journal in the country failed to speak of the topic at the approach of the Fourth, both last year and this, and to urge the necessity of thorough surgical treatment of blank cartridge wounds, as well as the desirability of the prophylactic use of antitoxin. Much credit is due the *Journal* for investigating and tabulating the results of the accidents that occurred all over the United States from celebrating the Fourth last year. The list of dead and injured will probably not be any less this year.

ACCIDENTS ON JULY 4, 1903.

Deaths from tetanus.....	406
Deaths from other causes.....	60
Non-fatal injuries	3,983
Total persons dead or injured.....	4,449
Tetanus cases from blank cartridges.....	363
Tetanus cases from all other known causes..	29
Other injuries from blank cartridges and fireworks	2,461
Other injuries from fireworks, powder, cannon, and all other known causes.....	1,364

*Read before the Yolo County Society for Medical Improvement.

The *Journal* was able to learn of but seven recoveries from tetanus, so that the mortality would be well above 95 per cent.

Etiology.—Tetanus is an acute or subacute infectious disease caused by a specific organism, the tetanus bacillus, and characterized by violent, tonic spasms with marked exacerbations and remissions. In almost all cases of tetanus, trauma is a predisposing cause, making a place of entrance for the pathogenic organism. Lacerated and contused wounds, especially where nerves are involved, are favorable for the development of tetanus. Injuries to the hands and feet are apt to permit infection more than are other parts. The disease, however, may follow surgical operations, extraction of teeth, vaccination, burns, insignificant scratches or puncture injuries from splinters, rusty nails, needles, tacks, etc.; and there was an epidemic of tetanus in St. Louis from the use of diphtheria antitoxin manufactured by the City Board of Health; but the tabulated report of the *Journal* shows an overwhelming frequency from the blank cartridge wound—406 out of 466.

Bacteriology.—The tetanus bacillus growing under favorable conditions is a characteristic drumstick-shaped organism, whose peculiar feature is a considerable enlargement at one end, in which enlargement a bright, round spore can be seen. The non-spore-bearing bacilli are long and slender, having rounded ends; are motile, and are numerous when conditions of temperature and environment are favorable. The organism will not grow in the presence of the slightest amount of oxygen, which fact renders its successful cultivation a matter of some difficulty. It stains readily by Gram's method, and with ordinary watery solutions of the aniline colors. The organism is widely distributed in nature. It is almost everywhere to be found—in garden and field soil, in the street dirt of cities, about manure piles and in the foul mud of marshes and river beds. The reason that more people are not infected by this well-high omnipresent germ is because it is anaërobic, and is one of the few of those organisms known to be pathogenic to man.

The condition in which tetanus is usually seen depends upon the anaërobic nature of the germ, and the famous rusty nail wound is dangerous, not because of the rust, but because the germ is carried into tissues far removed from air. For the same reason mixed infections are favorable to the development of tetanus, as the other organisms requiring oxygen for their support use up that which may reach them, and so make conditions favorable for the tetanus bacilli. The spores are very resistant to outside influences, retaining their vitality for months or years in a desiccated condition, and not being destroyed in two and a half months when present in putrefying material. Splinters of wood covered with tetanus spores after being kept for eleven years have been found still capable of causing tetanus in mice. Spores will stand exposure to 80 degrees Centigrade for an hour, but are killed by a temperature of 100 degrees Centigrade in five minutes. They resist the action of 5 per cent carbolic solution for ten hours, but succumb when acted upon for fifteen hours. The addition of .5 per cent HCl to the carbolic solution will kill the spores in two hours. In a solution containing one to one thousand bichloride of mercury, 5 per cent carbolic acid and .5 per cent hydro-chloric acid, the spores are destroyed in five minutes. The tetanus bacillus produces gas in media containing sugar but not in acid. It forms sulphuretted hydrogen abundantly, and a little indol. It produces powerful toxins which can be separated from the cultures by filtration. These are tetanin and tetanotoxin. Brieger and Frankel have also isolated from culture products an intensely poisonous toxalbumin. Of these toxins, one, tetanin, causes the characteristic symptoms of tetanus; another causes tremors, convulsions, and

subsequent paralysis; a third causes at once intense clonic and tonic spasms; the tetanus bacillus remains localized in the part of the body to which it has been introduced, and does not invade other parts. The symptoms are caused by the toxins. It is extremely seldom that the tetanus bacillus enters the blood or reaches remote organs; such cases have been recorded in literature but five times, and so it becomes possible to stop the progress of infection by removing the infected tissues. Furthermore there are few, if any, fatal infectious diseases in which the number of bacteria are so small, for it is often difficult to demonstrate them with the microscope in the wound secretions or the tissues.

Pathology.—The disease is characteristically and purely toxic in nature, and without typical or constant morbid anatomical changes. Congestions occur in different parts, and perivascular exudations and granular changes in the nerve cells have been found. The condition of the wound is variable. The nerves are often found injured, red and swollen. There seems to be little doubt that the chief poison produced by the tetanus bacilli has a specific affinity for the ganglion cells of the anterior horns of the cord, with which it unites with such great firmness that it cannot readily be separated. From the experiments of Meyer and Ransom it would seem that tetanus toxin does not reach the spinal cords through the blood stream, but by slowly passing along the axis cylinders of the motor cells from their terminations. This would explain the length of time that elapses after its injection before the appearance of the first symptoms. Apparently the myelin sheath acts as a quite impervious membrane, and the toxin enters at the end of the neuron, where it is not provided with this sheath. Sensory nerves do not transport the toxin to the cord. The toxin enters the nerve endings from two sources; the first is at the site of the infection, where the toxin is most concentrated, and this probably explains why tetanic spasms frequently begin in the vicinity of the infected parts or are most marked at this point. The rest of the toxin is taken up by the blood and lymph and distributed, to enter the motor endings in small quantities all over the body, and by passing along the motor fibers to enter the cords diffusely, leading to the generalized spasms. The latent period that elapses after injection of the toxin, before symptoms, is occupied by the passage of the toxin along the motor fibers to the spinal cord. If the toxin is injected directly into the spinal cord, symptoms appear at once. This also helps to explain the rather long incubation period observed in human tetanus, which is usually five or ten days. The first part of it is occupied by the growth of the bacteria and production of the toxins, the rest by the passage of the poison along the nerves to the cord. The antitoxin evidently follows the same route, and in clinical cases seen after tetanus has begun the antitoxin is a considerable distance behind the toxin in reaching the ganglion cell, which must have much influence in determining the results of the treatment.

Symptoms.—After an injury the period of incubation varies considerably—from ten days to two weeks. The onset is gradual, with soreness and stiffness in the muscles of the neck and jaw, until at the end of from one to three days the mouth cannot be opened (trismus or lockjaw). This muscular rigidity or tonic spasm extends to the muscles of the face and trunk, in less degree to those of the legs, while the arms are often exempt. The "risus sardonicus" is generally present, and there may be opisthotonos or some other fixed position. An aggravation of the spasms, which may have somewhat relaxed, is produced by any sudden stimulus, such as a loud noise, a draft of air or an attempted movement. These spasms are always continuous, never intermittent. Some patients complain of great pain; others of none whatever.

The mind usually remains clear throughout. The temperature, in mild cases, may be but little raised. Usually it reaches 104 or 105 degrees Fahrenheit; sometimes as high as 108 degrees Fahrenheit during life, and it often rises a degree or two after death. The body is bathed in sweat, the urine is scanty and often albuminous. Death may occur within twenty-four hours from the outbreak of the disease, or not for four or five days.

Prophylaxis.—It is evident that the treatment of tetanus must be prophylactic, for but a very small percentage of recoveries has occurred, apparently under 5 per cent, in spite of quite general use of antitoxin. It has been well said that the patient who is just showing tetanic symptoms is not beginning to have tetanus, he is beginning to die from it. The spasms of tetanus are practically the death agonies of an infection that has existed for several days before their onset, and experience has shown that tetanus antitoxin is then of but little value. Surgeons who have carefully cleansed and drained blank-cartridge and firecracker wounds have had but few cases of tetanus. Surgeons who have also given antitoxin while the wound was fresh have had none. We are accustomed to consider on good grounds the ninth day of incubation as the turning point in estimating prognosis in traumatic tetanus. Cases with a shorter duration than that seldom recover, whereas the more prolonged the onset is, after the ninth day, the better the outlook. By far the majority of boys with "Fourth of July tetanus" have not only completed the incubation before that time, but have completed the disease and are dead. An incubation of from four to five days, with a duration of the disease of twenty-four to seventy-two hours, is frequent. Recovery is remarkably rare. As the mortality from tetanus is observed about the time of the national celebration on the Fourth of July, it naturally follows that in the prophylaxis this important factor should not be omitted. The prophylaxis of tetanus may be considered under five heads: First, the enforcement of existing laws regarding the sale of toy pistols and other dangerous toys; second, the enactment of laws by congress, state legislatures and municipalities against the manufacture and sale of toy pistols, blank cartridges, dynamite caps, cannon crackers, etc; third, the open treatment of all wounds, however insignificant, in which from the nature or the surroundings there is any risk of tetanus; fourth, the immediate use of tetanus antitoxin in all cases of Fourth-of-July wounds, wounds received in barnyards, gardens or other places where the tetanus bacillus is likely to be present or tetanus infection to occur; fifth, the injection of tetanus antitoxin as soon as tetanic symptoms become manifest.

During the past few years several physicians with large hospital practice have used antitoxin prophylactically for Fourth-of-July injuries with complete success. Taylor of New York has treated many patients this way without tetanus following. There is not a single instance on record in which a person who had been given antitoxin soon after receiving a suspicious wound has developed tetanus, nor of any harmful results from its injections into persons not infected with tetanus. For prophylactic purposes 10 cc. should be injected in the same manner as diphtheria antitoxin, but in the vicinity of the wound, if possible; and, according to Meyer and Ransom, best into the muscle, if the wound is in the fleshy part. This should be done immediately after the wound is cared for, if antitoxin is at hand, but if not, it can be used with profit at any time that it can be obtained within the next few days, since the period of incubation is so long.

The demonstration of bacilli by the microscope would be indication for the most vigorous use of antitoxin for several days, until the period of danger is

past. In all cases in which the wound is or becomes infected with bacteria, a second dose of the same size should be injected three or four days later. Only in simple cases, with perfectly clean wounds, should one be satisfied with a single injection. If the patient is under eight years, 5 cc. doses should be adequate.

The nature of blank-cartridge wounds is primarily explosive. The chief damage is done beneath the skin, and the distance to which the injury extends is unbelievable unless one is familiar with these injuries. The size of the channel formed by the explosion is usually smallest near the skin, and enlarges for some distance into the deeper tissues until the wads are reached, and there spreads laterally in a mass of bruised and lacerated tissue, blackened by fire and powder. The surgical treatment of the wound must therefore be most thorough. Safety demands that every part into which dirt from the surface can have been blown be cleaned out and so packed that air can enter and wound secretions escape. This requires anesthesia and careful dissection. Cauterization is not to be recommended, for if the bacteria are not entirely removed, we seal them in most effectually.

Prognosis.—The *Journal* gives the mortality as 95 per cent in Fourth-of-July tetanus. Several different authorities give it from 70 to 90 per cent. The shorter the incubation, the more serious the case; if it be only two, three or four days long, the case will almost certainly be fatal. Any rise of temperature is ominous, and the higher it is the less likely the patient is to recover. Rapidity of pulse and respiration is also a bad sign. The least dangerous cases are those in which the spasm remains localized in the jaw and neck muscles. The number and the violence of the spasms bear a direct relationship to the severity of the disease.

Treatment.—The treatment suggested in the *Journal of the American Medical Association* of June 18th of this year covers all treatments suggested by other sources, so I will give it verbatim:

As soon as possible after the patient is seen general anesthesia should be produced, and the wound cleaned out most carefully in order to put an end to further formation and absorption of toxin. Every shred of necrosed tissue should be removed. Free drainage and access of air should be secured by loose packing with iodoform gauze. Antitoxin should be administered. By far the best results that have been recorded seemed to have been obtained by those who have injected the antitoxin into the spinal canal. As tetanus affects particularly the anterior horns of the spinal cord, this seems to be more logical than the intracranial injection, and it has the great advantage of not adding a considerable operation to the already critical condition. The method used is to introduce the needle of the antitoxin syringe into the sub-arachnoid space by passing between the third and fourth lumbar vertebrae. The cerebro-spinal fluid should be permitted to escape up to 150 drops. This fluid is more toxic than the blood serum. The syringe containing 10 to 15 cc. of antitoxin should be attached to the needle, and its contents slowly injected, allowing at least five minutes for the process. This should be followed by injection with a fine needle of as much as possible of the antitoxin into the substance of and along the course of a large nerve trunk, preferably the one supplying the injured part. This method is based on the newer observations concerning the paths by which the antitoxin reaches the spinal cord; and lastly, still another 10 cc. may be injected in the vicinity of the wound. Eling reports a case in which he gave altogether 1,300 cc. (about three pints), with recovery. After the operations and injections, a subcutaneous saline infusion is desirable, because much fluid is needed by the patient, and it is a difficult matter to feed him without adding to the source of irritation. The patient should then be placed in a quiet, darkened room, with deadened floor, and complete plugging of the ears is advantageous. Every possible means should be taken to avoid any disturbance which may start up spasms. For this purpose morphin, chloral and bromids should be exhibited, sufficient, if possible, to keep the patient stupid. For the first twenty-four hours feeding should be limited as much as possible for the same reason, but after that time it needs to be pushed, as there is great exhaustion. The nourishment must be liquid, and usually has to be fed through a tube. Rectal alimentation is valuable if it can be given without too great disturbance. The subarachnoid injection, always preceded by the withdrawal of cerebro-spinal fluid, the

introduction of 10 cc. subcutaneously, and the saline infusion should be repeated every twenty-four hours as long as indicated. Bacelli's carbolic acid treatment is used by the Italians particularly, but has had quite general application. It simply consists in injecting subcutaneously 1 per cent carbolic acid solution, in sufficient quantities so that about five grains of the acid is given an adult during twenty-four hours. Dr. S. A. Matthews has published a method of treatment by a special salt solution that is very effective in experimental animals. He calls it producing cell catharsis. It produces most profound diuresis. The formula is:

Sodium chloride	55.5 grains
Sodium sulphate	155.0 grains
Sodium citrate	51.0 grains
Calcium chlorid	2.0 grains
Water	2 pints

This may be injected intravenously very slowly, not over three drams per minute in quantities up to one pint at each infusion, which should be performed twice the first twenty-four hours and once each succeeding twenty-four hours. The profound diuresis that this solution produces must have greater or lesser beneficial effect, and it is probable that the calcium reduces the muscular spasms.

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INNERVATION OF THE HEART AND USE OF CARDIAC STIMULANTS IN TREATMENT OF SHOCK.*

By O. O. WITHERBEE, M. D., Los Angeles.

THE NEED of more satisfactory measures for the care of patients suffering from shock has long been felt by physicians, and an attempt to meet the demands has in many cases been made with, perhaps, as little consideration of the true physiological derangement as is usual in the treatment of the most obscure maladies.

The term "shock" is an expression for a group of clinical symptoms the result of failure of important functions of the body, such as circulation, respiration, excretion and secretion and general metabolism. It is intimately associated with the nervous mechanism. The phenomena of "shock" are complicated, and open a wide field for experimental work. It is not my intention, however, in this article, to discuss a line of experimental research, but rather to cite a few facts; that is, as far as facts may be considered from a physiological standpoint.

It is known that the heart possesses the power of independent pulsation; that its contraction is not effected primarily by nerve energy. The nervous system, however, exercises to a marked degree control of this organ, and it is only under circumstances of an exceptional character wherein the mental or physical condition is violently disturbed that this role of subordination is for a time thrown off. Two important sets of nerves are concerned in the regulation and control of the heart. Those derived from the tenth cranial or pneumogastric exercise an inhibitory influence, while those from the three uppermost ganglia of the sympathetic accelerate the contractions of the heart and, at the same time, augment their force. Physiologists have also undertaken the demonstration of a similar mechanism contained within the heart itself, in the form of the intracardiac ganglia, attributing to these structures the very important function of automatism. The most we could hope to realize from isolated collections of nerve tissue of this character would be reflex action; but here it is evident there is no probability of a complete reflex arc. The transition from the afferent to the efferent fiber of a reflex arc, so far as we know, never takes place in highly organized animals except through a nerve plexus. In the peripheral ganglia the nerve cells appear to give off no branches that form a plexus around them. They seem to be trophic cells

interpolated in the course of the fibers whose nutrition they govern, or stations at which nerve fibers break up for their terminal distribution, not junctions through which impulses may be shunted from one kind of a fiber to another.

The sympathetic ganglion cell may, indeed, have several processes, but one of them is the axis cylinder of a medullated fiber that comes to it from a higher center, and the other the axis cylinders of, it may be, five or six non-medullated fibers passing from it to their destination. Here there is no anatomical foundation for a reflex arc, and the most careful physiological experiments have failed to demonstrate any reflex function in the sympathetic ganglia. Argument in defense of the function of this nerve apparatus of the heart has been presented on the ground that the latter, when removed from the body, or deprived of all the nerves passing to it, still continues to beat for a time, and, in cold-blooded animals, even for a day. Engelman has called attention, however, to the fact that in the foetus pulsation of the heart begins at a period when the latter is still absolutely devoid of nerve cells and, consequently, of nerve fibers. In the human embryo the first beginnings of cardiac ganglia are not found before the end of the fourth or commencement of the fifth week, while Pfluger has seen regular pulsation of the heart in a human embryo of hardly three weeks, which denotes purely a myogenic action entirely independent of any nerve influence.

If, then, we grant the power of independent action on the part of the heart and yet subject it functionally to the control of the nervous system, we must expect to meet with a variety of conditions calling for therapeutic measures in our experience with the derangements of the circulatory apparatus.

Faulty circulation means primarily an incompetent heart, yet the organ in itself may or may not be deficient. Certainly the same remedy will not meet the indication in every instance. If the governing power of the nervous system is for a time withheld, we must temporarily substitute its action as best we may, and endeavor, in some rational manner, to restore its influence. Our line of treatment must depend on the condition to be met, and certainly must vary according to the nature of the derangement we have to overcome. If the centers are merely depressed and not exhausted, stimulation will arouse them. If, however, their excitability is greatly reduced from overstimulation or lack of tone, the result of prolonged or violent irritation, then we may expect that anything short of rest or recuperation will merely intensify the condition, thus leaving our patient in a worse state than we found him.

Direct violence in the vicinity of the solar plexus produces a paralyzing effect which is communicated to auxiliary plexuses, resulting in vasomotor paralysis of all or a greater part of the vessels of the abdomen. In order to compensate for this loss of function, the heart must increase its labor to a very great extent. With pronounced shock to the solar plexus we have paralysis also of the inhibitory nerves. The disastrous results following such a condition are characterized by a heart running at random, wild and erratic, without any control. The organ is then virtually severed from its controlling influence, and to reach it through the nervous system is, for the time being, absolutely futile. When the vasomotor center is exhausted, stimulants such as strychnia (the action of which is confined entirely to the spinal cord) are either valueless or harmful, because if the center is exhausted, strychnia can have no effect, and, if partially exhausted, the stimulation will be followed by a deeper depression.

Shock may be as readily induced by vasomotor stimulants as by injuries or operations; both are stimulants in a way, and neither can be employed with advantage in the treatment of shock produced

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

by the other. Alcohol is a depressant. Nitro-glycerine is useful only in certain conditions of the arteries. The vasomotor effect of digitalis is objectionable on the same ground as that of strychnia. As to its direct effect on the heart's action at this time no results are obtained, for when the peripheral resistance is lost, an increase of the heart's action has no effect on the blood pressure. Normal salt solution is not, in any considerable quantity, retained in the blood vessels. If an over-quantity is given, death may be caused by asphyxia, due to accumulation of the solution in the splanchnic area mechanically fixing the diaphragm and the ribs. What then is to be done?

After first settling in our minds the true nature of the derangement, and reasoning, from a physiological standpoint, that to attempt further stimulation of already depressed centers will merely intensify the condition we are seeking to overcome, there remains but one course to pursue. The blood vessels are relaxed, and we cannot control them through the nerve apparatus. Can they be reached by direct stimulation? Crile has resorted to mechanical pressure by means of a pneumatic rubber suit which he has found will give a definite control of the blood pressure from twenty-five to forty millimeters. This creates an artificial peripheral resistance, causing the blood to flow back to the heart regardless of the posture of the patient, and is accompanied by no unfavorable effects. Pneumatic suits cannot always be provided, nor are they always in working order. So we are again confronted by the problem of direct stimulation. Hot salt solution in the abdominal cavity will, in the majority of cases, give very happy results; but sometimes its introduction is followed by a decrease instead of a rise of blood pressure; and while it may act as a local vasomotor stimulant, it has no immediate or direct action on the heart. Something is needed which will affect not only the vessels of the splanchnic area, but also those of the entire vascular system, and at the same time exert a direct action on the fibers of the heart. This must act independently of the nerve apparatus, and the manner of its introduction must be such as will facilitate the least possible delay.

Extracts from the suprarenal gland have met the indications in a larger percentage of cases than any therapeutic agent yet employed. Reichart has shown that it has a direct action on the heart and blood vessels as well as on both the centric and peripheral vasomotor systems. It is also a respiratory stimulant, and increases general metabolism and body temperature. The brilliant experiments of Crile, Martin and others point even more forcibly toward this as a remedy of great importance in the treatment of shock. It is not markedly toxic, and may safely be given far in excess of amounts sufficient to increase blood pressure. This simply accentuates the increase, and is not followed by a compensatory drop. Laboratory experiments show that epinephrin, by intravenous injection, is the most powerful cardiac and vasomotor stimulant yet presented to the profession. Its value also as a respiratory stimulant in the treatment of shock is perhaps of no less importance, while at the same time it increases general metabolism and body temperature. Battelli believes it to be essentially a process of oxidation, and calls attention to the fact that after the blood pressure has returned to normal, following the injection of epinephrin, there is an abundance of the drug to be found in the blood. Carnot has noted that in order to get the same results the dose injected into an artery must be far in excess of the amount injected into a vein; and especially is this true if the muscles to which the artery is distributed are in an exhausted condition. The struggles of an animal when partially under an anesthetic are sufficient to neutralize small doses of the drug. This would indicate that the ef-

fects are transient, and may be manifested more or less imperfectly, depending on the manner of its introduction. Given by the mouth or rectum it is inert so far as its systemic effect is concerned; this is due to the rapid alteration which it undergoes in the body.

Results cannot be expected from doses of less than two cc. of the one-to-one-thousand solution when given by hypodermatic injection, and this should be diluted with at least nine parts of normal salt solution. In urgent cases this strength can be given intravenously, and should be pushed until the heart unmistakably responds to its influence.

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DISCUSSION.

Dr. C. R. Krone, Oakland.—I am glad to have heard this paper. A year ago I had the pleasure of reading a similar paper before this same society. The paper has not been published in the *STATE JOURNAL*, but I would now like to support in the most powerful way what Dr. Witherbee has said on the use of these stimulants. I would also like to say that there seems to be a peculiar oxidizing process going on. I remember epinephrin solution in an attempt to stop hemorrhage, and the result was that a turbid red blood made its appearance, showing that an oxidation took place. I believe that the administration of normal salt solution and digitalis, etc., has done an enormous amount of harm in cases where it has been pushed, and pushed, and pushed. I find that there are some things that can be given, but digitalis and strychnin and normal salt solution are not medicines of that kind. I feel that perhaps one of the very best things that we can depend upon is the solution of epinephrin chlorid.

Dr. Harry M. Sherman, San Francisco.—The paper of Dr. Witherbee staggered me when I saw the title, because I thought it was going to deal with the heart in a different way. I think none of us who have read the book of Crile have felt anything but dismay. We have had patients with shock, and have injected strychnin, then digitalis, then plenty of alcohol and coffee by rectum, and we have seen a great many patients recover, but we have seen a number die. Looking back at these things in the light of what Crile teaches, we have to appreciate that these patients who recover have practically done so by chance. When I have said this to some men they have said that clinical experience weighed against everything in the book, and that they would continue doing so. I confess that I have seen so many patients die after all this care that I am thoroughly impressed that to give strychnin is to whip an exhausted horse. Practically, we are thrown back upon epinephrin. It is practically the only drug which Crile leaves us. He leaves that because it acts directly upon the muscle wall. I have begun as Crile has suggested, with the saline solution intravenously, putting it in very diluted solution, and the effect has been satisfactory. With regard to the rubber suit, we cannot always have the rubber suit. In one case the other day a child was going into shock and we put on the Martin bandage on the leg; it worked very well. It was shown that the blood pressure came up several millimeters, and the child improved. Then we took off the rubber bandage and the child became worse, so we put it on again. In giving epinephrin there is the possibility of its being an over-stimulant to the heart. For that purpose Crile advises the administration of the therapeutic dose of atropin.

Dr. C. W. Murphy, Los Angeles.—I think one of the most important things is the fact that the action of epinephrin is very transient, and should be quickly repeated.

Dr. S. J. Hunkin, San Francisco.—This idea about the use of epinephrin is all very well, but it does not seem wise to me that it should go out from this society that everything that we have done in the past has been the wrong thing. I believe that too much stimulation in shock is certainly bad. I have seen many patients die even after we have done everything we could to stimulate them; still it has been impressed upon me that salt solution injected into the venous system up to a certain amount revives the patient. I have seen a patient practically dead, and I have seen the color come back and the child get well. Sometimes they only pick up for a time, then die. But there is no doubt in my mind that salt solution did revive the child.

Dr. O. O. Witherbee, Los Angeles.—First of all in this discussion, in bringing out our disappointments in stimulants, we must give reasons, more than I have entered into; physiological reasons why we are many times disappointed in the administration of strychnin. We can get along very well without it. Many times it has been given to the detriment of my patients. I have had my assistants repeat the dose, with no effect. This was before Crile had brought out the facts which he has written. I have used the sphygmomanometer in all my late cases in which I have used epinephrin. With reference to normal salt solution, it is very efficient in some cases, particularly where there is hemorrhage, and sometimes where there is shock. If we have the abdominal cavity open there is no question of its use there. I have noticed that instead of raising the blood pressure, the blood pressure is lowered. We do not expect any medicinal effect from the normal salt solution. There is a difference between the words shock and collapse, as we all ought to understand. Collapse is the early condition which tells us what will follow. Shock is the exhausted condition. We must not mistake collapse for shock. There is no question about overstimulating under these preparations. In some cases we would get the most marked results following the use of strychnin and digitalis, but then our patient was not in shock, but in collapse. That may explain some of our bad results.

OHIO STATE ASSOCIATION ON ADVERTISING.

In resolutions presented early to the house of delegates, and passed unanimously, the Ohio State Medical Association takes a high stand in the matter of advertising in medical journals. Advertisements of patent and proprietary medicines and of preparations whose composition is unknown were declared to be contrary to the principles of medical ethics; and it was further decided that any journal which the association might in future adopt as its official organ should submit its advertising as well as its reading pages to the censorship of the publication committee of the association. The house of delegates further called attention to the advertising pages of the *Journal of the American Medical Association*, and directed its delegates to the meeting of the association next month at Atlantic City to do everything in their power to bring about a change in the advertising material appearing in that journal which would provide for a closer allegiance and a more strict interpretation of the ethics of the profession as applied to medical advertising. — *Cleveland Medical Journal*, June, 1904.

[Note. As we have repeatedly stated, the use of the term "patent medicines" as above is inaccurate. True patent medicines—medicines really patented—are not objectionable for that reason, because everything about them can be learned for the small sum of five cents. What is meant here is an entirely different thing—the nostrum—the "patent medicine" of popular parlance. If the Ohio delegates made any effort to see that a change was brought about in the character of the *Journal A. M. A.* advertising, it was not at all apparent to a close observer in the House of Delegates at Atlantic City!]

DETERMINATION OF THE FUNCTIONAL CAPACITY OF THE KIDNEYS WITH SPECIAL REFERENCE TO KIDNEY-SURGERY.*

By M. KROTOSZYNER, M. D., San Francisco.

SINCE Gustav Simon of Heidelberg, on the 2d of August, 1869, performed the first successful nephrectomy, and since he proved that this organ, considered indispensable to man heretofore, could be removed with subsequent benefit to the patient, surgery of the kidneys and ureters has made unprecedented advances, and may, in its technique, be considered complete and perfect. However, statistics of mortality for nephrectomy, even at the hands of the most experienced operators, are very unsatisfactory. Czerny, for instance, of 33 nephrectomies, lost 51 per cent.; Tuffier, of 8 nephrectomies, 37.5 per cent., and Thornton, of 25 like operations, 20 per cent. These poor results and those published by many others, which are omitted for the sake of brevity, prove that one point was overlooked by all these operators—the condition of the remaining kidney.

Until a few years ago our methods of examination in suspected kidney-lesions, preferably unilateral ones, consisted in:

(a) Inspection, percussion, palpation of both kidney regions, methods that are, to say the least, unsafe and without value to the average physician. Admitted that an artist in the technique of palpation, like James Israel, under favorable conditions can diagnose by palpation a renal neoplasm of the size of a pea; that also by percussion occasionally an enlargement of a kidney may be diagnosed; no careful surgeon will be prepared to operate on the basis of such doubtful diagnostic evidence. Besides that, it is a fact that some kidneys cannot either be palpated or percussed, because they will not descend below the costal arch, even in lean people and under deep respiration.

(b) Radiography. Unfortunately this method does not give satisfactory results, especially for the question whether both kidneys are present or not. It is of value in the presence of renal calculi, but if the Roentgogram does not show anything abnormal, we are not justified in concluding that no pathological condition may exist.

(c) Cystoscopy. This method is at present generally recognized as valuable. It will satisfy us in the majority of instances upon the presence of two ureteral openings and upon the fact that they functionate. But aside from the rare instances where one solitary kidney is connected with two ureters, simple cystoscopy does not decide the all-important question upon the condition of the other kidney. For the fact that the other kidney secretes does not exclude the possibility that it may be absolutely valueless to the organism.

* Read before the San Francisco County Medical Society.

(d) Palpation of both kidneys through either laparotomy or lumbar incision. It is true that this heroic method will prove the presence of two kidneys, their size and consistency, but it will not disclose anything upon the value of the remaining kidney for the future of the patient, because autopsies are reported in abundance where kidneys thought to be normal by palpation *in vivo* were actually found to be only a mass of fat or an atheromatous cyst, etc.

All these methods of examination do not throw any light upon one important question: What is the functional capacity of the other kidney? It is apparent that the removal, or for that matter, any operation on one kidney will be followed by disastrous results upon the organism, if the other kidney does not exist or is unable to functionate for both after the operation. In other words, we must not only know in planning an operation on one kidney that a second secreting kidney is present, but that this remaining kidney will be able, after the removal of the other to do the work of both.

In the last few years diagnosis of pathological conditions does not only aim to ascertain the anatomical lesion, but also to determine the amount of actual work, or the function of the diseased organ. Stokes introduced into medical literature for the capacity or lack of capacity of the heart-muscle the terms "sufficiency and insufficiency," and Rosenbach first used for gastric disturbances the term "gastric insufficiency". More than ten years ago Senator called attention to the importance of this nomenclature for the pathology of kidney-affections. The great difficulty in solving the question of renal sufficiency and insufficiency arises through the fact that we have to deal with two organs, either of which, under certain conditions, may or must do the work of both. Therefore, investigations have to ascertain the function not only of both, but of either kidney separately. To measure the least amount of work of a secreting organ, as the kidney, is only made possible by obtaining its secretions separately, which is accomplished by ureteral catheterization. This method therefore represents the only means by which the work or the functional capacity of each kidney separately can be measured accurately.

When ureteral catheterization began to be practised more generally, its foremost value for the diagnosis of kidney-lesions consisted, in the opinion of most authors, in its permitting a safer diagnosis of an anatomical kidney-lesion, or, as it were, to recognize the fact that one kidney was diseased. The appearance, color, chemical and microscopical analysis of the different urines obtained by ureteral catheterization showed with infinitely greater accuracy than before which was the diseased kidney and the character of its anatomical lesion. But experience soon proved that the evidence thus gained was not very valuable as far as the post-operative chances of the patient

were concerned. It is a well-known fact that kidneys in an advanced state of degeneration automatically, may functionate well for a long period, because even a small part of parenchyma will for some time by compensation functionate sufficiently, in order to offset the amount of work that should be furnished by the diseased tissue. In other words, the future of our patients after an operation on one kidney or its removal does not depend so much upon anatomical changes in the kidney as upon disturbances of its function. Therefore, we do not any more consider the presence of an anatomical disease in the remaining kidney as a counter-indication to nephrectomy. In renal tuberculosis, for instance, we don't hesitate at present to remove one kidney in spite of the fact that the remaining kidney is found to be moderately diseased, provided that its function is thought to be sufficient to insure a tolerable existence to the patient in the future. If we therefore agree-upon the value of determining the functional capacity of the kidneys, we must analyze those methods at our command that will give satisfactory results.

The first efforts to solve this problem were directed towards chemical examination of the kidney-secretion, or the urine, especially with regard to excretion of urea. Disturbances in the excretory capacity. Most prevalent among physicians is the idea that a considerable reduction of the so-called normal amount of urea excreted in 24 hours forms a counter-indication to operative procedures. We know today that a quantitative determination of urea is entirely worthless unless the N introduced into the system and the quantity of N excreted by the bowels during a certain period are known. So many technical difficulties have to be overcome, so much time is lost in order to make a scientifically reliable test of metabolism of urea, that this method can in reality be considered impracticable. Many investigators have besides proven through experiments that even in healthy individuals a considerable decrease in excretion of urea for several days may occur. For chronic renal affections v Noorden and Ritter have shown that periods with large N excretion and such with N retention will occur and that a typical equal relationship between N ingestion and N excretion in kidney diseases does not exist. All these facts force us to conclude that the determination of excretion of urea is of no value for the question whether the kidneys are normally functioning or not.

The same is true of the excretion of chlorids. Hofmann proved by many experiments that even in uremia the excretion of chlorids changes so materially in quantity that no exact conclusion can be drawn from this test.

French investigators, foremost among them Achard, studied renal function under normal and pathological conditions by testing the eliminative powers of foreign substances introduced into the

organism for that purpose. We owe to Achard and his school very exhaustive experimental investigations upon the excretion of methylene-blue by healthy and diseased kidneys. He used intramuscular injections of 0.05 methylene-blue and made methodical tests upon beginning, duration and quantity of the excreted drug. The method consists in comparing a certain measured quantity of the 24 hours' urine with the same amount of methylene-blue solution which is diluted until it shows the same color-index. It was found in this way that the quantity of the excreted drug is the most important test, normally about 0.025 being excreted. Lessened permeability for the drug was found in contracted kidney, while in parenchymatous and amyloid forms no deviation from the normal quantitative excretion was ascertained. Aside from the fact that this method is very tedious and, of necessity, inexact, as conclusions have to be drawn from colorimetric comparisons, it is only a valuable adjunct in diagnosis. Admitted that under certain pathological conditions renal permeability for methylene-blue varies; nevertheless, that does not prove anything upon the amount of renal secretory activity. The same is true of other drugs (iodid of potash, etc.) used for the same purpose.

Chemical action taking place in the kidneys has been studied as a means of determining renal function. It is known that the kidney-parenchyma forms synthetically from benzoic-acid and glycol, hippuric-acid and it was natural to presume that a diseased kidney will either not at all or only to a limited extent cause this chemical process. But it is uncertain whether the kidneys are the only organs producing hippuric-acid and besides that the methods of hippuric-acid determination are so difficult and give such inexact results that in this way nothing of value can be gained for determining renal function. Of greater value for our question is the determination of the molecular concentration of urine, or kryoscopy. A few words upon the theory of kryoscopy may not be amiss.

Through the walls of the capillaries, Bowman's membrane and the epithelium of the tubuli a continual exchange by osmosis of the urinary elements takes place. Osmosis is in direct proportion to the molecular concentration of all solutions and is measured by determination of the freezing-point. The richer a substance is in molecules, the lower is the freezing-point below that of distilled water. Dreser showed that the kidneys have the faculty of lowering the blood-pressure in the organism, therefore the freezing-point of urine normally is found to be lower than that of blood. The force, on the other hand, by which a change in osmotic pressure of the fluids passing through Bowman's membrane is caused, is diminished in all diseases of the organism and especially in renal affections. Under such conditions the freezing-point of urine will approach that of blood. A. v. Koranyi, who introduced

this method into practice, arrived by his experimental studies at the following conclusions: A parenchymatous kidney-lesion will be signified by an abnormally low freezing-point of urine (hyposthenuria). Wherever the freezing-point of urine is slightly lower than that of blood, we may conclude that the kidney-parenchyma is almost totally diseased. With growing improvement of kidney function the freezing-point is found to rise, and whenever the freezing-point of urine by repeated consecutive tests is gradually lowering, an unfavorable outlook as regards future kidney function can be taken. Kryoscopy is, therefore, particularly important for the prognosis of presumably reparative kidney-affections. This method seems to be of diagnostic value in renal affections because it does not only prove retention of one single excretory element like urea but of the total of molecules secreted by the kidneys, and because every physician can easily master its technique.

If it is true that the comparative estimate in the freezing-point of blood and urine forms a reliable method as regards sufficiency and insufficiency of renal capacity, we must combine kryoscopy of blood serum with that of urine in order to arrive at comparatively safe conclusions. Kryoscopy of blood is important for the reason that by its aid we are enabled to recognize slight deviations from the normal, molecular concentration of blood under normal conditions being stable and never changeable (0.56-0.58 below the freezing-point of distilled water).

The kidneys having the faculty of removing waste tissue-molecules from the blood, it is apparent that disturbances in renal capacity will be signified by increase in molecular concentration of blood. Manifold and carefully conducted experiments in animals, as well as in men, have proven that an increase in molecular concentration of blood is generally indicative of disease of both kidneys and the intensity of kidney-lesion is in direct proportion to the increase of molecular blood-concentration. Although it was found by other investigators that in kidney-affections complicated by advanced hydrops or anemia the blood freezing-point was found to be normal, while the renal function was actually insufficient, I must agree with Kimmel, who looks upon the comparative estimate of the urine and blood freezing points as particularly valuable diagnostic methods. More valuable results, especially for surgical purposes in unilateral kidney-affections, can be obtained by determining the freezing points of urines separately obtained from each kidney by ureteral catheterization. If here the freezing-point of urine on one side is very low, approaching that of blood, but that on the other side normal; if besides that the freezing-point of blood is within normal limits, then Kimmel concludes that renal capacity is sufficient, and since it is reasonable to assume that the largest amount of work is done by the supposedly healthy kidney,

he generally advises an operation and has, as he personally told me, never seen a case where his conclusions were not verified by favorable post-operative functional results. This leads to the question of actually determining the work of each kidney separately, or the relative capacity of one kidney to the other, a question that could only be answered by ureteral catheterization. By this method one fact above all was quickly established through systematic investigation: Both kidneys excrete almost equally as regards time and quantity. This enables us to draw conclusions upon the function of either kidney with urines obtained during a comparatively short time (about 30 minutes). Great stress must be laid upon collecting urines simultaneously from either kidney. Casper and Richter state that reliable results can only be obtained if urines from both sides are obtained at the same time. While some (Casper) prefer to catheterize both ureters for this purpose, another (Nitze) warns against catheterizing the presumably healthy side; he obtains the urine from that side by introducing a small-calibered Nelaton catheter into the bladder after having catheterized the supposedly diseased kidney.

If, then, about an ounce of urine from each kidney is collected, both urines are first quantitatively tested for urea, and if we find normal amounts on one side and a considerable reduction on the other, we can utilize this method as well as the comparative estimate of excretion of chlorides as an auxiliary proof of unilateral insufficiency. Most valuable for determining the work of each kidney is kryoscopy of both urines. While in normal kidneys, as it was found by numerous tests, the freezing-point of urines collected at the same time is always about equal (between 1 and 2), a considerable difference is generally present in unilateral kidney-affections. This corresponds with my own experience, and where a freezing-point below 1 is found, we are justified to assume that renal function on that side is insufficient.

A method of less value for our purposes seems to be Achard's methylene-blue test in connection with ureteral catheterization. The use of this test in practice is generally prevented by the fact that in order to observe beginning, intensity and end of methylene-blue excretion, the ureter-catheter has to remain *in situ* several days. This was done by Albarran and Bernard in several instances and their results did not prove any superiority of their own over the other methods, especially kryoscopy. Whether Achard's method or its modification by Albarran and Bernard ever will get into practical use is doubtful.

The more valuable for determining the function of each kidney separately seems to be the so-called phloridzin test, a glucosid producing acute glycosuria, which as it was found by many experiments on animals and men, is not connected with the usual hyperglykemia, but originates in the kidneys. Minkowski and Zuntz have proven the

renal origin of this glycosuria through such convincing experiments on animals that the local effect of phloridzin upon the renal parenchyma cannot be doubted. Their experiments have also proven that without the action of the kidneys, no excretion of sugar takes place. Klemperer first studied the effect of the drug upon diseased kidneys and stated that glycosuria did not appear in cases of contracted kidney. While investigators at first used very large doses (injecting 1.0 and more of phloridzin) Achard and Delamare proved that much smaller doses were sufficient to produce glycosuria, and they arrived through their observations at the conclusion that reduction or complete disappearance of phloridzin glycosuria are characteristic of organic kidney disease. But the intensity of the kidney-lesion can not be ascertained from the amount of absolute glycosuria, neither can any conclusion be drawn in this way upon unilateral renal affections. Only since Casper combined this method with ureteral catheterization, it has successfully been used as an index for the function of each kidney. Phloridzin measures indirectly the quantity of the functioning parenchyma and thus the amount of kidney capacity. As glycosuria after phloridzin injection begins and ends in a very few hours (about 3) the beginning, duration and end of glycosuria can be studied under ureteral catheterization carried over a comparatively short space of time. It was found that only the intensity or quantity of glycosuria is important for our purposes, and that it is immaterial at what stage of phloridzin-glycosuria the two urines are examined, because both healthy kidneys secrete after phloridzin injection the same amount of sugar. I have generally used 1 to 2 cc. of a $\frac{1}{2}\%$ solution of phloridzin, and made three quantitative sugar tests, the first one-half, the second one and the third about two hours after the phloridzin injection. The quantitative sugar tests were always made with Lohnstein's saccharometers.

It would consume too much time to report results with the different methods for determining renal capacity on my own material, which will be done in a subsequent paper. The conclusions drawn from experience with these methods of others and my own are: Sufficiency or insufficiency of kidney action can not be determined by examination of urine alone. The only method seeming to give accurate results is kryoscopy of blood. The capacity of each kidney may be measured separately by ureteral catheterization combined with quantitative determination in both urines (a) of certain chemical constituents (urea, chlorides, etc.); (b) their molecular concentration; (c) saccharin after phloridzin injection. All these tests have not so much absolute value as where they show a certain relative coincidence. If a clinical picture together with these functional tests enumerated above, prove the presence and functional capacity of one kidney, we will certainly be enabled to operate on one kidney without

fear of losing our patient through post-operative insufficiency of the other.

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MEDICAL SOCIETY MEETINGS.

Alameda County.

The regular meeting of the Alameda County Medical Society was held on July 12, the president, Dr. Maher, in the chair. Twenty members present. The subject presented was that of "Diet."

Dr. C. H. Miller read the first paper, on "Liquid Diet," in which he said: "Nearly all of us should be more particular in outlining the regimen of those cases needing a liquid diet. In outlining such a regimen the following general rules should be borne in mind: 1. Be sure that the patient likes the article of diet that you recommend, and that it agrees with him. 2. Such food as is most grateful, though not so wholesome, is to be preferred to that which is better but distasteful. 3. If an article of diet disagrees, give it in less quantity or less frequently. 4. Changes in diet should, when possible, be made very gradually."

The doctor then took up the various liquid foods and their manner of preparation, including milk with its modification, koumis, cereal waters, soups and beef teas, gelatin, fruit juices and proprietary liquid foods. In closing, he referred to the following general rules governing the administration of the food: 1. Do not, if possible, interfere with the sleep of the patient. 2. Administer food every two or three hours, and insist that the quantity necessary for proper nourishment be given at each dose. 3. See to it that the food is taken slowly.

The second paper was read by Dr. Shuey, on "Diet in Health and Disease."

"The way the majority of people eat is to take anything that pleases the palate. This popular standard is faulty. On the other hand, we have the food crank, such as the vegetarian. Both of these, the epicure and the food crank, seem to thrive and maintain a fair degree of health. As examples of this can be quoted the case of a vegetarian who averaged five pounds a day, and an epicure who averaged twenty-seven pounds daily, both of them keeping in fairly good health. In 1896 Congress appropriated \$20,000 for the purpose of investigating human food. The investigators were to find out, first, the kind of food needed to keep the body in normal condition; second, the amount needed to supply heat and energy; third, the food stored for future use. From such investigations we hope to have established a correct dietary standard upon a scientific basis. Sir Henry Thompson says that one-half the disease which embitters the middle and latter part of life is due to avoidable errors in diet."

DISCUSSION.

Dr. Stratton.—I think that not enough stress is laid upon broths and soups, as they are nourishing and pleasant to take.

Dr. Von Adelung.—The medical world has passed through all stages of peptonizing, sterilizing, etc., and those who have given the most attention to the subject have gone back to simple milk. It is a lamentable fact that most people eat too much.

Dr. Buteau.—In the question of food, each person is a law unto himself. People, like engines, vary in the amount of energy they produce from the same amount of fuel taken. If food is not oxidized there is a loss of energy. Time is an important factor. All food, even liquid, should be taken slowly.

Dr. Milton spoke of the proprietary foods being largely alcoholic, and thought that they were prescribed too freely.

Dr. Riffin.—Liebig's extract has been fed to dogs to the exclusion of other foods, and the dogs died of uremic poisoning.

During executive session a resolution was passed striking out the word "regular" from among the qualifications necessary for a practitioner to be eligible to membership in the County Medical Society.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

Canadian Medical Association.

The meeting for 1904 will be held in Vancouver, opening August 23d, and remaining in session for four days. Mr. Mayo Robson, the London specialist, is to be the guest of honor. Extensive preparations have been completed to entertain the members of the association and visitors.

Kern County.

At the May meeting of the Kern County Medical Association the report of the special committee having in charge the prosecution of two members of the society for criminal abortion was presented and discussed, and the committee instructed to present the matter in proper form to the State Board of Medical Examiners.

The report of the delegate of the association to the meeting of the Medical Society of the State of California was presented, and other routine business transacted.

Owing to the illness of the patients, the symposium on anurism and clinical demonstrations was postponed.

W. S. FOWLER, Secretary.

Mississippi Valley Association.

The thirtieth annual session of the Mississippi Valley Medical Association will be held at Cincinnati, Ohio, October 11, 12, 13, 1904, under the presidency of Dr. Hugh T. Patrick of Chicago. The headquarters and meeting places will be at the Grand Hotel.

The annual orations will be delivered by Dr. William J. Mayo of Rochester, Minn., in "Surgery," and Dr. C. Travis Drennen of Hot Springs, Ark., in "Medicine." Request for places upon the program, or information in regard to the meeting, can be had by addressing the secretary, Dr. Henry Enos Tuley, Louisville, Ky., or the assistant secretary, Dr. S. C. Stanton, Masonic Temple, Chicago, Ill. The usual railroad rates will be in effect.

Orange County.

The Orange County Medical Association held its regular monthly meeting July 5th.

Dr. Andrew Steward Lobingier of Los Angeles very kindly consented to occupy the time allotted to the essayist, and gave the society one of his practical, scholarly, common-sense talks on the treatment of peritonitis. The doctor prefaced his talk with a review of some of the cardinal symptoms of peritonitis, giving special emphasis to pain, vomiting and rigidity of the abdominal muscles. He urged early diagnosis and early operation as giving the best results of any treatment known. In short, it was one of those plain,

practical talks, easily grasped and comprehended by the general practitioner.

After discussion by the members, Dr. J. R. Medlock invited those present to accompany him to the Rossmore Hotel, where he had arranged a tempting banquet, and where every one forgot they had ever seen a case of peritonitis.

H. S. GORDON, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. Parkinson. The president, Dr. Henderson, called the meeting to order, and the following members answered roll call: Drs. Atkinson, Baldwin, W. E. Briggs, Hanna, Hatch, Henderson, James, Martin, McKee, Nichols, Parkinson, Poore, G. L. Simmons, Stevenson, Stroder, Sutliff, Twitchell, G. A. White, J. L. White, Wilder, Wright and, by invitation, Drs. Williams and Beauchamp.

Dr. Twitchell reported a case of multiple neuritis of the lower extremities following a staphylococcus infection of the tonsils. Dr. Twitchell stated that he had heard of numerous like cases arising from streptococcus and diphtheritic infections, but had been unable to find a record of a neuritis following staphylococcus infection.

A free discussion was then indulged in by members of the society concerning the compilation of the forthcoming State Register.

The paper of the evening was read by Dr. J. E. Poore on intestinal catarrh. Discussion was opened by Dr. G. L. Simmons, and partaken in by many present. Meeting then adjourned.

J. W. JAMES, Secretary.

San Benito County.

The regular monthly meeting of the San Benito County Medical Society was held at the residence of Dr. F. O. Nash on Monday evening, July 11th, with President J. H. Tebbetts in the chair.

Questions of interest were thoroughly discussed by those present, and "Diphtheria" was selected as the subject of discussion for the next regular meeting.

A committee of three, consisting of Drs. J. M. O'Donnell, F. O. Nash and J. H. Tebbetts, was appointed to draft a set of resolutions of sympathy and condolence to the family of our late departed brother and member, Dr. T. Flint.

The committee reported as follows:

Whereas, We, the members of the San Benito County Medical Society, deeply conscious of the great loss which we have sustained by the recent death of our honored brother and member, Dr. Thomas Flint; and **Whereas**, That by the death of Dr. Thomas Flint we, as the profession, and the community in general have lost a true and valued friend;

Resolved, That we acknowledge his death with great sorrow and distress, and to his widow and family tender our deepest sympathy in this their hour of sad bereavement; and

Resolved, That these resolutions be inscribed in our minutes, and a copy thereof forwarded to the family of our deceased member.

J. M. O'DONNELL,
F. O. NASH,
J. H. TEBBETTS,
Committee.

On motion a special meeting will be called Thursday, July 14th, at the Bank of Hollister for the purpose of conferring with Mr. T. S. Hawkins, who has expressed his intentions of erecting a memorial hospital, providing he can obtain the support of all the physicians of the county.

J. M. O'DONNELL, Secretary.

San Francisco County.

The regular monthly meeting of the San Francisco County Medical Society was held on the evening of July 12th, with President J. Rosenstirn in the chair.

The special committee appointed to confer with the State Board of Medical Examiners, consisting of Drs. George H. Evans, J. Henry Barbat and George Blumer, reported having had the conference, and recommended that the society employ an attorney, whose duty it should be to prosecute illegal practitioners, and that a circular letter be sent to all physicians of San Francisco requesting that the committee be notified of any such illegal practitioners known to them. The report was accepted, and action on the recommendations postponed until the next meeting, the secretary being instructed to notify all members of the proposed action.

The following named were proposed for membership: Drs. Grant Selfridge, Caroline Rosenberg and C. E. Beebe.

Dr. C. G. Kenyon, one of the delegates to the recent meeting of the A. M. A., at Atlantic City, and chairman of the Board of Councillors of the State Society, in reporting, stated that during the sessions of the A. M. A. a subscription was started for the purpose of erecting a memorial in honor of Dr. Walter Reed. Dr. Kenyon, after consultation with his colleagues, promised on behalf of California a subscription to the amount of \$500. Notice was given that at the next meeting of the County Society a motion would be offered to appropriate \$200 toward the fund.

Dr. Philip Mills Jones, also a delegate from California to the A. M. A., reported on the matter of inviting the association to meet in San Francisco next year. He said that the association was very favorably impressed with the idea, but as two meetings had already been held in San Francisco, it was voted to meet in Portland, Or., next year.

The scientific program consisted of a report on "Nephrolithotomy, Followed by Hemorrhage," by Drs. C. M. Cooper and Wallace I. Terry, with demonstration of radiograms and calculi. The discussion was participated in by Drs. J. Henry Barbat, Krotoszyner, Carpenter and Grosse. "Flicker's Diagnosticum in Typhoid Fever," by Dr. E. O. Jellinek; "Report of a Case of Retinitis as the First Manifestation in a Case of Diabetes," by Dr. C. S. G. Nagel.

The reading of "Post-operative Jaundice," by Dr. F. B. Carpenter, was postponed at the author's request.

Sonoma County.

The Sonoma County Medical Society met in Elks' Hall, Petaluma, on the evening of July 14th, Dr. Jesse presiding.

The fee bill was completed, and the committee having the report in charge was authorized to have the same printed and distributed to the members.

Dr. W. J. G. Dawson of Eldredge was elected a member of the society on a transfer card from Napa County Medical Society. Dr. Fred F. Sprague of Sonoma was also elected to membership. Dr. E. T. M. Hurlbut was elected an honorary member. He has practiced a half century, and is still an active medical man—God bless him!

The scientific subject for the evening's discussion was introduced through a paper by Dr. J. M. Crump on "Paresis." It is known as general paralysis of the insane, parietic dementia, etc., and is a disease of middle life, and thought to be of the nineteenth century. As a definition, it is a subacute inflammatory disease of the brain, though it may also extend to or originate in the spinal cord; also implicate the larger nerve trunks. He said it was usually divided into three stages, not very sharply defined, as follows:

First Stage—Tired feeling; slight headache; easily worried; insomnia; lapse of memory; extravagance with money; loss of the natural affections; neglect of business affairs; showering of presents. One of my

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Aiol Airogen Airoform
Calcium beta-naphthol sulphonate	{ Abrastol Asaprol
Creosote Tannate	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)
† Epinephrin	{ Adnephrein Adrenalin Adrenamine Adrenol Adrin Caprenalin Hemisine Hemostatin Suprarenalin
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine ...	{ Aminoform Ammonio-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
" , anhydromethylen citrate ..	{ Helmitol
Levulose	{ Diabetin Fructose Fruit Sugar

Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin	{ *Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	{ Dulcin Sucrol
Phenyl-dimethyl-parazonon . (Germ. Pharm.)	{ Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin
Phenylacetamide	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone	{ Acetophenone Hypnone
Plant pepsin	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-cafeate	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration	{ Iodothyrene Thyroidin
Trioxymethylen	{ Paraformaldehyde Paraform Triformol
Abrin = Jequiritin	
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Alsol	
Australian oil Eucalyptus = Flucol	
Bismuth chrysophanat = Dermol	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphol	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1% solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Dimethyl-xanthine = Theobromine	
Guaicol carbonate = Duotal	
Laricinic Acid = Agaricin	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garanotose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloracetic acid, 50% solution = Acetocautic	

* Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, 1903, page 178.

MEDICAL SOCIETY MEETINGS.

(Continued from page 260.)

patients, who claimed to be supreme commander of all the navies of the world, offered to make me a present of a nugget of gold as large as the state of Washington, and of the same shape, and a mile deep or thick. He was happy and contented, and did a great deal of work in the wards. Some take on the type of melancholia, while others the expansive mania.

Second Stage—Increasing weight, but weaker; tremulous voice; spasmodic twitching of lips; epileptiform seizures due to congested brain, liable to follow a full meal. Now the patient may call himself king, Christ, etc.; becomes more untidy; steals useless articles; fills his pockets with rubbish.

Third Stage—Profound dementia; emaciation, exhaustion; he ultimately becomes a living skeleton. Now he has to be dressed, fed and confined to his bed, loses control of the sphincters of bladder and rectum; finally instinct for food alone remains.

Diagnosis—Loss of memory; changed moral sense; violent impulses; melancholia; mania; hesitating, slurring speech; tremors of lips, tongue and Argvill Robertson pupil.

Prognosis—Fatal in two to two and a half years.

Treatment—Hygienic, symptomatic, expectant.

Postmortem—Calvarium is thickened; diploë extremely vascular; dura mater thickened, congested, unduly adherent to calvarium. Remains of chronic pachymeningitis.

Dr. Crump, in closing his able paper, said it was stated a few years ago that cholin, one of the poisonous ptomains, had been found in the cerebro-spinal fluid. It would be interesting to know the stage of the disease in which it was found, and in what rela-

tion it stands in regard to etiology and prognosis of paresis. Cholin is a colorless fluid of oily consistency, has basic qualities, and is extremely unstable by the removal of the element, water; cholin is converted into the poisonous neurin, and by oxidation cholin is converted into muscarin, a ptomain even more poisonous than neurin.

Dr. Gray followed with an able talk on the subject matter of the paper, and Drs. Urban and McMullin also took part in the discussion.

It was then agreed to meet in Healdsburg on August 11th, with the following program: Paper, R. M. Bonar; subject, "Dissemination of Diseases"; on discussion, A. T. Browne, J. E. Maddux and Fred F. Sprague.

At 10:40 o'clock the members were invited by Dr. George Ivancovich to a sumptuous feast of Petaluma's good things. Dr. Jesse was toastmaster, and many were the good wishes and compliments of the evening. All agreed that the Petaluma meeting was our best one.

G. W. MALLORY, Secretary.

AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION.

Physicians are invited to apply for membership in the American Electro-Therapeutic Association. The requirements for membership are the same as other National and State societies. Those received as members in answer to this invitation will have the advantage of no initiation fee (heretofore \$5), and all members receive the *Journal of Advanced Therapeutics*, without extra charge. Annual dues, \$5. Next meeting will be held at St. Louis, September 12-15, 1904. John A. Rockwell, M. D., is president. Address the *Journal* office, 259 William street, New York.

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ANNOUNCEMENT

Mr. W. H. Farley, formerly manager of Lengfeld's Pharmacy, Sutter Street, and Mr. W. S. Quinn, formerly manager of Wakelee & Co., Sutter Street, desire to announce that the store formerly owned by Wakelee & Co., Polk and Sutter Streets, San Francisco, has been purchased by them and will continue to be conducted as an up-to-date pharmacy in every respect, under the name of Wakelee's, and earnestly solicit your patronage.

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J. F. PLUMEL

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PHILIP MILLS JONES, M. D., Secretary and Editor

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IMPORTANT NOTICE!

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

SEPTEMBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

The Royal Commission which has been investigating the relation between human and bovine tuberculosis for the past three years has recently made a partial report. The commission finds that animals infected with tuberculosis derived from man exhibit no gross or histological differences in pathology, nor any perceptible variation in clinical effects from those animals inoculated with bovine tuberculosis. This is contra to the theory advanced by Koch and supported by some observers, and is of importance. Its direct bearing on the milk question cannot be gainsaid, and there should be no modification of the existing legislative restrictions in regard to cattle afflicted with tuberculosis: rather they should be increased and more rigidly carried out. A final report has not yet been handed in by the commission, but there is no reason to believe that the completed work of that body will materially differ from or contradict this preliminary utterance. All cattle in or near communities of men, and especially all cattle on milk ranches and dairies, should be carefully inspected, and at sufficiently frequent intervals.

Two pretty strong lay publications—*The Ladies' Home Journal* and *Everybody's Magazine*—agree with the STATE

ADVERTISING "PROMOTES." JOURNAL OF MEDICINE in believing that to advertise a thing is to "promote its use," and acknowledge that admitting quack-medicine "ads" to their advertising pages would help to swindle their readers and profit the nostrum men. It is certainly unfortunate that some, or rather most medical journals, cannot appreciate the truth of the argument and realize their absurd and undignified course. They claim virtue for their reading pages, but admit their advertising pages to profitable prostitution. Even official organs and journals "owned, controlled and published" by the medical profession are doing the same disgraceful thing. It is a great shock, for instance, to see *American Medicine* "promoting the use" of Fig Syrup by giving it a whole page of space in a journal that is "founded, owned and controlled by the Medical Profession of America"!

In May, *Everybody's Magazine* launched a rather widely advertised campaign against nostrum advertising. A few pages of quack medicine "ads" were dropped and several thousand letters were written to doctors and medical journals, calling attention to the fact. We were strongly tempted to comment on this at the time, but decided to wait and see what happened. Shortly after *Everybody's* gun was fired, the *Ladies' Home Journal* got the range and loosed a highly explosive shell; the article on "Patent Medicines" has been widely copied. Unfortunately for the Curtis Publishing Co., Mr. Bok, in his article in the *Ladies' Home Journal*, chose for special attack one of the very few, if, indeed, not the only one of the host of "nostrums" which probably does not contain any alcohol. This particular one is, we believe, made by a process suggested some fifteen years or so ago by Prof. Hallberg; the alcohol with which the vegetable principles are extracted is replaced by glycerin. Thus was the strength of Mr. Bok's attack very greatly weakened, for his paper was promptly sued for \$200,000, and he was compelled to retract, editorially, in a subsequent number of his journal. He might have said all that he did say, about any one of the nostrums in the table published and which we have reprinted, and been perfectly safe. It is an illustration of a very unfortunate blunder.

In the case of *Everybody's Magazine*, the spasm of virtue was more apparent than real. It is true that they did drop some pretty rank "ads," and for that much they deserve credit. But in their circular letter they say: "We decline to carry any patent medicine or other fraudulent and otherwise objectionable advertise-

ments in our magazine." Dr. Frank C. Todd of Minneapolis called the attention of the publishers to the fact that they were not living up to the claim set forth in their letter, inasmuch as they published the advertisements of such things as "Dent's toothache gum," "Hessler's hair restorer," and the "Morley artificial eardrum," which is claimed to help every case of deafness. We cannot do better than quote Dr. Todd's own letter:

It is hardly necessary for me to point out that by eliminating many quack advertisements and making the claim that you "decline to carry *any* patent medicine or other fraudulent and otherwise objectionable advertisements," you are doing more harm than a magazine containing many such fraudulent advertisements, but making no claim to decency, because many readers will be led to believe that those which you do publish are trustworthy. Such being the case, these fortunate few advertisers should be able to pay well for such consideration. While in your first letter you stated that you declined to carry "any patent medicine or other fraudulent advertisements," in your last you admit your claim to be a myth, but think you should be considered upright because you carry less than some other magazines—on the principle that it is less criminal to steal \$1,000 than to steal \$5,000.

Closely following the action of the two lay journals already mentioned, came the rumor that the United States, through the **THE NOSTRUM AND THE MAIL.** Postoffice Department, was about to do wonders by excluding publications carrying nostrum advertisements, from second-class privileges. There seems to be but little doubt that the Postal Department has full legal right to take such action, if it may; but, knowing the tremendous influence of the nostrum makers, we decided to wait and see just about how much real meat might be found in this particular egg. As we suspected, a microscope will be quite useful to anyone seeking the "meat." If a citizen complains that an advertised medicine is a fraud or its advertising statements are obscene, it will (perhaps) be investigated. If the claim of obscenity or fraud shall be substantiated, publishers will be notified that if they print the "ad." their publications cannot be taken as second-class matter. Thus far the energy of the Postoffice has been devoted to the investigation of tuberculosis and lost manhood "cures." It is extremely doubtful that the alcohol "cures," which contain from 20 to 40 per cent of alcohol, will ever be molested by a lobby-ridden paternal government!

Dr. Hideyo Noguchi, who since leaving this country and his work with Prof. Flexner has been doing research work in Copenhagen, writes to Dr. Weir **SERUM FOR SNAKE VENOM.** Mitchell under date of April 27th, giving an outline of his results.*

A goat was immunized against rattlesnake venom by continued injections over a period of several

months. Experiments on guinea-pigs then showed that the serum from this goat would prevent death from *Crotalus* venom even when twelve times the normal lethal dose of venom had been administered to the pig. Three hours after the administration of two killing doses, animals become critically ill, and will die in about thirty minutes if the serum is not employed; the injection of four cc. of the serum ensures the recovery of the animal, and no symptoms are apparent after two days. As a result of his work with Prof. Flexner, and more recently abroad, where he is working under a grant from the Carnegie Institution, he is entirely convinced of the falseness of the claims of Calmette, to the effect that his anti-venin, produced as an immunizing serum against the venom of the cobra, is protective against the bite of all venomous serpents. The results of his work are certainly of great interest, and other communications from Dr. Noguchi will be looked for with anticipation of still further advances in our knowledge of the subject under investigation.

A milk supply protected only by a required standard based on chemical analysis, fat percentage, etc., may be not only filthy but also very dangerous. The bacterial content of an average sample is really the only safe indication of the quality of milk; of course assuming that no preservative has been added. That milk and cream containing comparatively small numbers of bacteria can be supplied commercially has already been sufficiently well demonstrated in New York and New Jersey. Time and again it has been shown that the average bacterial content of milk as ordinarily produced and marketed in cities is well over 1,000,000 per cc., often exceeding and generally equalling the bacterial content of sewage. The Boston Board of Health has recently established a bacterial standard and provided for the condemnation of milk or cream found to contain more than 500,000 bacteria per cc. This limit is certainly high enough, and there is grave question as to whether it should not be decreased by 200,000.

A nurse at the Marine Hospital in San Francisco accidentally gave a patient bichlorid of mercury, and the patient died. A police judge held the nurse in heavy bonds. Subsequently the matter came before Dr. Leland, the Coroner of San Francisco, and he took occasion to pass a few compliments to the police judges for the manner in which they fail to support the law in the case of rich or "influential" citizens, but get industriously after one who is without coin or "influence." These are merely the facts. The *San Francisco Chronicle* in its issue for August 6th, commented editorially on

* *Univ. Penna. Medical Bulletin*, July-Aug.

the remarks of Dr. Leland, praising his attitude, and, with him, condemning the police judges. One of Dr. Leland's statements, quoted by the *Chronicle*, is: "The Police Courts do not attack in this way those who perform criminal operations with the worst of motives." No one will dispute that fact, nor will he fail to recognize the fact that the abortionist, the performer of "criminal operations for the worst of motives," is one of the hardest of criminals to convict, largely because he generally has plenty of "influence." Part, at least, of his influence is derived from the support which he receives from the daily press, and incidentally the very daily paper which editorially condemns the police courts for not doing their duty! The same issue of the *Chronicle* contains, of course on another page, the following choice morsels for the delectation of the mothers and daughters and sisters in the homes which it enters: "Ladies who are in trouble or suffering from irregularities or suppressions. . . I positively guarantee immediate relief from irregularities from whatever cause. . . Dr. White." "Ladies suffering from irregularities. . . Immediate relief from irregularities from whatever cause. . . Dr. Sylvester." (We are advised that this man holds a license to practice, under another name.) And so on, for nearly half a column!

The great value of having a card record or index of every physician in the state needs no explanation. It is practically an absolute essential to the proper publication of the annual Register and Directory of Physicians. Also, it is necessary in order to keep track of the physicians of the state as they move from place to place. It is gratifying to report that the vast majority of the members of the Society and physicians of the state generally seem to appreciate this fact, and have promptly sent back to us the blank cards which have been mailed to them from this office. Some few, however, do not seem to apprehend that this is a matter of sober, serious business, and have been so childish as to make trivial, pert or impudent comments on their cards, or have failed to give the information desired. The Publication Committee is considering the advisability of publishing such comments in the Register, though a decision has not yet been reached. If you have received your card and have not yet returned it, please do so AT ONCE; if you have not received a card, please advise us AT ONCE. If you have any criticism, comment or philosophical dissertation to make, please make it in a letter and not on the card. The Publication Committee will most emphatically NOT be responsible for any errors or omissions in the Register unless the correct information is on file on the regular form card, in this office.

Some time ago a member of the Society living in the southern part of the state was victimized by a man who purported to be an agent of P. Blakiston's Son & Co., medical book publishers. He took an order for Da Costa's

FRAUDULENT BOOK AGENT.

blood examination, filled out a receipt on a regular blank of the publishing house, received \$5.00 for which he receipted on the blank, and departed. Time went by and no book having been received, the doctor wrote to the house to know why. In reply they wrote: "Sam Wright does not work for us, and has never been employed directly by us; he was employed at one time by a man who was manager of our subscription department; afterward, he worked for Knight & Brown of New York City; we think at present he is engaged with Edward Bronson, San Francisco. While these people all handle our books, we are not responsible for the actions of their agents." It certainly seems a rather peculiar thing to deny all responsibility for the acts of a man though employed not by the house, but by the manager of the subscription department of the house! There is apparently some subtle distinction to be drawn which is not apparent to the ordinary individual. However, the lesson is plain; do not pay money to anyone representing himself to be connected with the house of P. Blakiston's Son & Co.

The Board of Examiners has announced that it will no longer undertake the work of prosecuting illegal practitioners, and it becomes the duty of county medical societies to take up that task. The board will direct its energies, in future, to seeing that the letter of the law is followed and lived up to in the matter of credentials. Just before the last examination the credentials committee of the board discovered that almost if not all the medical schools in California had issued diplomas to one or more students who had not remained in school the requisite time—not less than six months in each of four separate years. Doubtless in all these cases the error was one of oversight and not one of direct intentional commission; yet the law was not complied with. In one instance (the Hahnemann Medical College) a complication of this sort arose through the change in date of the commencement of the annual course. Up to October, 1903, the course began in May and ended in October; that year it was changed to conform with most other schools, beginning in October and ending in June. The step was taken only after advice with the New York State University Regents and the Illinois State Board of Health. Unfortunately, the first course under the new time schedule ended in June, 1904, instead of running to July, so that all of the students (with one or two exceptions) are affected. The law requires that four courses of not less

than six months each in four separate years shall have been taken before a diploma, which is a requisite credential for admission to the examination before the board, may be issued.

The term of study of all but one of the graduates of the Hahnemann Medical College, ending in June of the present year, was a few weeks short of the legally required time. When this matter was presented by the credentials committee of the Board of Examiners to the dean of that school, he at once saw the desirability of maintaining the integrity of the law. All of the students of that institution to whom diplomas have been granted for this last term will be required to re-enter the school in October and study till December, when they will be granted new diplomas, and will be eligible to appear before the Board of Examiners at the succeeding examination. There was no plea for leniency; no request that the law be ignored "just this one time"; no desire to evade the issue. The decision was immediate and clean-cut; the law should be lived up to. We are certainly to be congratulated upon this wise decision, for it leaves no ground for complaint by any school at any time that in any single instance the medical practice act was ignored or set aside. The other medical schools in which individual instances of a somewhat too short term of study have occurred can but follow the example which they have been set without grumbling, and live up to the wise letter of the wise law.

Dr. Oliver T. Osborne, Chairman of the Section of Materia Medica, etc., of the A. M. A., made the subject of his address at the Atlantic City meeting a discussion of nostrums and unlicensed or illegal practitioners. **NOSTRUMS AND QUACKS.** It was an excellent address, and was published in the *Journal A. M. A.*, July 2, 1901. That of it which had to do with nostrums was entirely devoted to the, popularly called, "patent medicines," and ignored the most dangerous class—the nostrums vended through the physicians of the country—the secret-formula "proprietary" preparations. Elsewhere in the JOURNAL will be found an extract from *Printers' Ink*, a publication devoted to advertisers and their interests. Read it carefully and then stop and think whether you are being "worked" in this way. Think whether you are doing all of your duty, or whether you are lazily going through life prescribing "ready-to-take-medicine" in the original package. The same number of the *Journal A. M. A.* which reprinted a portion of the article from *Printers' Ink*, contained, among other advertisements, some of them irreproachable, the following choice collection; it may be that the composition of some of the stuff here presented for the consideration and

use of reputable physicians, is known; if so, we should like to know it: Listerine, Colden's Liquid Beef Tonic, Iodomuth (seems to be good for most everything), Urasol, Thigenol, Vasogen, Lactagol, Gonosan, Mey's Poultrice, Dioviurnia, Neurosine, Ergoapiol, Bovinine (advertised on fences, billboards, lay press, etc., etc.), Sal Hepatica, Unguentine (at first glance this "ad." looks like the announcement of a fire engine manufacturer), Tongaline, Uriseptine (the Gardner-Barada Co.'s fake-formula stuff), Chiolin, Cactina, Seng and, choicest morsel of all, Bartlett's Pile Suppositories," sent to anyone anywhere for \$1.00 per box! We miss our old friends, "Fig Syrup" and "Peruna."

The peculiar but not unique case of Jane Toppan, the Boston nurse who, in 1902, was arrested for the murder of a number of patients under her charge, is carefully analyzed in a recent number of the *Boston Medical and Surgical Journal*. A very decidedly praiseworthy detail in the proceedings against this individual was the agreement of the prosecution and the defense to the appointment of a commission of three experts, who examined and passed upon the mental condition of the prisoner with reference to her responsibility. "A more practical and satisfactory method, and one more in keeping with the principles of scientific inquiry, could not have been chosen, and its adoption by the attorney-general in such an important case would seem to be a long step toward abolishing, in criminal cases at least, the opposite customary practice which has done so much to discredit expert opinion." The JOURNAL most emphatically endorses the words of Dr. Stedman, who prepared the report in question, and commends them to the careful consideration of all the members of our Society. Can we not use our influence to secure similar action in criminal cases, and thus remove somewhat of the reproach which now attaches to "expert testimony"?

The Lane Lectures, at Cooper College, were delivered this year by Dr. Wm. H. Welch of Johns Hopkins, on the general subject of infection. **THE LANE LECTURES.** It would be quite impossible at this time or in the space at present command to attempt to review the course of lectures or in the slightest degree outline their scope and value. Unfortunately, the JOURNAL did not receive notice of the course until too late to publish a statement anent them in the August issue. We hope to be able to publish some of the lectures, or an abstract of the course, in subsequent issues, but at the time of writing nothing definite has been determined and we cannot promise it. Certainly the publication of these lectures would be of very great value to the medical men of California, and to the readers of the JOURNAL generally, and therefore we have hopes.

Dr. Welch's position in the scientific world needs no comment. He is always a pleasant and an instructive talker, and possesses to a high degree that faculty of all great men, the ability to discuss abstract scientific problems in simple, commonplace English. Among the physicians from out of town in attendance at the lectures the following were noted: Drs. W. J. G. Dawson, Napa; William T. Lucas, Santa Maria; F. C. E. Mattison, Pasadena; James G. Baird, Riverside; George F. Reinhardt, Berkeley; O. D. Hamlin, Oakland and Oscar J. Kendall, Riverside.

A full report of the examinations held in Los Angeles in July, and in San Francisco in August, will be found on page 283 of **JULY-AUGUST** this number of the **JOURNAL EXAMINATIONS**. It will be seen that the general average of successful and unsuccessful candidates remains about constant. In the two recent examinations, .6309% passed, and .3691% failed to pass or were "conditioned"; some of the conditioned have doubtless subsequently passed. As time goes by and rejected candidates return for re-examination, there is grave danger that the board may be weakened by establishing a very bad precedent and allowing some persons who have come before it a number of times, to be "marked up," and thus "pass." If such a step is once taken, it opens a field for other steps that in the end will entirely destroy the strength of the law. We do not know that any such thing has been or will be done by the board, but the danger must be recognized and guarded against.

The **JOURNAL** is trying its very best to do the right thing by everyone interested and to succeed.

WE NEED YOUR HELP. The policy adopted by your Publication Committee two years ago has been formally approved by the Society in convention. So long as there shall be a document known as the "Principles of Ethics," dealing with the subject of secret remedies, your Society publications will live up to it and refuse to promote nostrums by advertising them. Sometimes it takes a good deal of study to determine the right course of action, and no little strength to stick to it. The work of your Publication Committee and your editor is by no means light. Will you not help us as much as you can? Will you not help us by helping those who are helping us? The concerns which advertise with us are good and reliable; they tell the truth about their products and their preparations are to be depended upon and are reliable, to the very best of our knowledge and belief. Please patronize those who help us by advertising worthy goods in our clean pages, and thus endorse the stand which we have taken. Let them feel that you recognize a bond of friendly fellowship in this effort to do the right thing and hold to the decent course. If you have dealings

with them let them know that you are a member of the Society, receive its **JOURNAL** and appreciate the fact that they advertise in it. If you meet a representative of one of our advertisers tell him that you heartily support the action of your Society and approve the course of your **JOURNAL** and appreciate the endorsement of it which his house gives by advertising with us. You have no idea how every thing of that sort counts; it tends to establish and maintain a closer friendly feeling that counts for much in this world of business. If there is no choice between the output of two houses, one of which advertises with us, use the goods of that house and let the other house know about it. So can you help and help very greatly in carrying out the difficult task that has been set before your Council in the business administration of the Society. Please do not forget this request but act upon it. You are but working for your own Society and your own **JOURNAL**.

Bulletin 81 of the Bureau of Chemistry is the first document to be issued under a recent law granting authority to the Department of Agriculture to investigate food adulteration, etc.

BORIC ACID PRESERVATIVES. It reports the investigations of Dr. Wiley upon the action of boric acid and borax on the human economy. The experiments carried on were exceedingly valuable, and the deductions well within the proper conservatism. The whole report is too long to reprint or to fully comment on, but the summary of the conclusions is well worth the careful consideration of every sanitarian:

While many of the individual data obtained are contradictory, the general results of the investigation secured by combining into single expressions all the data relating to each particular problem studied show in a convincing way that even in doses not exceeding half a gram ($7\frac{1}{2}$ grains) a day boric acid and borax equivalent thereto are prejudicial when consumed for a long time. It is undoubtedly true that no patent effects may be produced in persons of good health by the occasional use of preservatives of this kind in small quantities, but the young, the debilitated, and the sick must not be forgotten and the safe rule to follow is to exclude these preservatives from foods for general consumption.

IS THE DRUGGIST AT FAULT?

"Anent the comments of the CALIFORNIA STATE JOURNAL OF MEDICINE (May) on 'Druggist Ethics,' quoted elsewhere, we must indorse the position taken. 'Que messieurs les assassins commencent!' If our friends, the physicians, will return to the original prescription the druggist will be only too glad to second their efforts and shelve the commercialism. The druggist has no desire to be simply a middleman for the manufacturers of proprietary articles, and would be glad to employ his skill in the preparation of prescriptions p. r. n., where brains are needed and their exercise paid for."—*American Druggist*.

In Germany prayer healing has become such a fad that pharmacopeias of prayers have been published, different prayers being carefully designated for different diseases and conditions.—*Journal A. M. A.*

REPORT OF THE TUBERCULOSIS COMMITTEE OF THE MEDICAL SOCIETY OF THE STATE OF CALIFORNIA.*

Your Committee, appointed at the Santa Barbara meeting of this Society, for the purpose of investigating the question of tuberculosis as it affects the State of California, begs leave to submit the following report:

As a basis for its report, the Committee endeavored to secure statistics upon the following points:

1. The number of cases of tuberculosis in the State of California.
2. The annual number of deaths from tuberculosis in the State of California.
3. The number of cases contracted within the State and the number imported.
4. The measures that are being taken in the various localities for preventing the spread of the disease.
5. Whether or not the physicians of the State are in favor of taking measures for its prevention.

To secure this information, letters with addressed postals for reply were sent to every physician, every municipal health officer and every county recorder in the State; about 4,000 in all.

To these, 1,225 replies were received. From health officers and county recorders, as follows:

1. There were 2,308 deaths reported as occurring in the State during the preceding year.
2. One hundred and sixty-one were reported to have contracted the disease within the State; but this did not include the report from San Francisco, Los Angeles, and many other important places.
3. Thirty-eight replies told of measures being taken for the prevention of the spread of the disease, most of which were vague and indefinite. The Southern California Anti-Tuberculosis League is the only organization in the State for the purpose of preventing the spread of tuberculosis.

From physicians, replies were received as follows:

1. There are 3,183 cases of tuberculosis in the State under medical care.
2. One thousand and fifty physicians expressed themselves as being in favor of taking preventive measures. Twenty were opposed to such measures.

The answers to this last question showed a remarkable lack of unanimity of opinion upon the part of the members of the medical profession as to what steps should be taken to prevent the spread of the disease in our State. However, they may be summarized briefly as follows:

1. Measures directed toward those who are afflicted to prevent the spread of infection:
 1. 70 favored disinfection of sputum.
 2. 22 favored disinfection of all ejecta.
 3. 20 favored health board supervision; 1 against.
 4. 77 favored compulsory notification of health officer.
 5. 54 favored anti-spitting ordinance.
 6. 3 favored public spittoons.
 7. 66 favored fumigation of the rooms of patients after death or removal.
 8. 8 favored disinfection of public drinking cups, etc.
 9. 18 favored disinfection of public vehicles and sleeping cars.
 10. 1 favored barring them out of hotels.
 11. 137 favored isolating all tuberculous individuals in separate communities, hospitals or grounds; 13 against.
 12. 13 favored segregation of the poor only.
 13. 4 favored the education of Eastern physicians not to send patients to our State when in the last stages of the disease; 1 against.

14. 85 favored preventing Eastern consumptives from coming here; 18 against.

15. 108 favored State sanatoria; 1 against.

16. 42 favored prevention of marriage of tuberculous patients.

II. Measures directed toward preventing the well from becoming infected:

1. 61 favored better house and personal sanitation.
2. 51 favored better municipal sanitation.
3. 143 favored a campaign of education by means of pamphlets, lectures and teaching in the public schools.
4. 71 favored physicians giving explicit instructions to the family as to the cause of the disease, and as to the necessary prophylactic measures to be taken.

Our investigations show that tuberculosis is scattered throughout the State, and that while the death rate from the disease is in the rural portions of the northern part is almost nil, that of the cities, especially San Francisco and Los Angeles, is quite high.

We wish to thank those who assisted us in this investigation, and appreciate the interest manifested by their replies, yet we are disappointed to find so many physicians in our State who have so little interest in this question, as to fail to reply when a printed return card was furnished them.

While we had no reply as to the number of deaths from tuberculosis from several health officers and county recorders, yet the number reported, 2,308, corresponds very closely with the number, 2,445, in thirteen months from January, 1903, to February, 1904, given by Dr. N. K. Foster, secretary of the State Board of Health, in a private letter to the Committee. It does not correspond, however, with the figures given in the census reports for 1900, which show that there were in California 3,480 deaths from consumption, 76 from hip-joint disease, scrofula, and unclassified tuberculous diseases; a total of 3,556 deaths assigned to tuberculosis. This illustrates the need for a better system of gathering vital statistics in this State.

One point upon which the Committee was especially desirous of obtaining information, was the relative number of cases developing within our State. Our replies to this question failed to give us the desired information; however, in thirty-six towns and cities in California, representing a population of 84,504, there were 161 deaths from indigenous tuberculosis, yielding a death-rate of 1.9 per 10,000 population. The total death-rate from tuberculosis in California is 25.6 per 10,000.

In studying the statistics of tuberculosis in the State of California, it is surprising to find that the death-rate from the disease in San Francisco is 32 per 10,000 population, while for Los Angeles it is 39. Thus the city which is the Mecca of Eastern consumptives shows a death rate only a little higher than San Francisco, which imports fewer in proportion to population.

This fact should be sufficient to show that such recommendations as:

1. Barring them out of hotels.
2. Isolating them in separate camps and communities.
3. Quarantining the State against them—are unnecessary. Not only are they unnecessary, but they are unscientific, impossible of enforcement, and inhumane. The agitation of such measures can do nothing but harm. It frightens the people, gives them an unjustified fear, and yet does nothing to prevent the spread of the disease.

Your Committee is opposed to all such measures, and believes that it is the duty of the Medical Society of the State of California to go on record as opposing their agitation.

*Read at the Thirty-Fourth Annual Meeting, Paso Robles, April 19-21, 1904.

The question of the prevention of tuberculosis is one that admits of a scientific solution, because the nature of the disease, its cause, the contributing factors and the manner in which it is spread are well-known facts. Its solution can be approached in two ways, by education and by legislation. In all instances the former should precede the latter, because legislation cannot safely precede education.

Therefore, your Committee would recommend:

1. That physicians attempt to carry out recognized measures for the prevention of the spread of tuberculosis, such as notification and disinfection, and that they educate their patients as to the nature of the disease and the manner of its prevention.

2. That we endorse the work done by organizations (such as the Southern California Anti-Tuberculosis League) which are attempting to combat the spread of this disease, by educating the people concerning its nature, and by carrying out active measures for prevention.

3. That we favor legislation, just so far as it can be of help in combatting the disease, but oppose all unscientific, impractical and inhumane measures. We are in favor of:

(a) The rigid enforcement of anti-spitting ordinances, as applied to public places.

(b) The provision of public spittoons.

(c) Health board notification, for the purpose of instruction and disinfection.

(d) State sanatoria for the poor.

4. That we deprecate all forms of phthisiophobia, and oppose all measures which tend to foster it, especially the quarantining of the State of California against the tuberculous and the prevention of marriage of tuberculous persons.

We would recommend that the work of the Committee be continued for the following purposes:

(a) To keep in touch with similar work done in other localities.

(b) To institute educational measures.

(c) To secure the adoption of anti-expectoration laws.

(d) To devise ways and means for securing the disinfection of public vehicles used for the transportation of consumptives.

(e) To present to the Governor and State Legislature the matter of the importance and necessity of State sanatoria for the treatment of the poor.

F. M. POTTENGER, Los Angeles,

JNO. C. KING, Banning.

GEO. L. COLE, Los Angeles.

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Committee.

THE ROLE OF THE GENERAL PRACTITIONER IN THE PREVENTION OF CONSUMPTION.*

By F. M. POTTENGER, Ph. M., M. D., Los Angeles.

IF THE ravages of consumption are ever to be checked, it must be accomplished through the agency of the family physician. Specialists may study the disease and learn methods of prevention; they may bring forth new methods of diagnosis and cure, but without the co-operation of the general practitioner their influence can only reach a very limited circle. Nearly every family in the land is visited some time during the year by its family physician or, in case of the very poor, by the district physician, while only very few come in touch with specialists; therefore, upon the shoulders of the family physician must rest the responsibility of preventing consumption and other communicable diseases. Not only does the burden of preventing consumption

fall upon the general practitioner, but his role in the prevention is a two-fold one. He can use his knowledge and opportunities in both preventing the spread of the disease and in detecting it in its early, curable stage, thus preventing it from reaching the consumptive stage.

I need not present statistics to prove to you the importance of this problem, for the physicians of California are awakened to its enormity. I take pleasure, however, in emphasizing the fact that consumption is on the decline, and that, if the physicians would but do their duty toward their patients and the friends of their patients, and use their personal and united influence with the existing authorities, this great scourge could be conquered and its victims could be made to be as few as those of smallpox or leprosy. Such a statement is revolutionary, but it is not a utopian dream. It is a possibility, if only there can be a conscientious, intelligent co-operation on the part of all who have to face this problem.

By the aid of indirect forces, such as the establishment of better hygienic conditions, the mortality from this disease has decreased among all civilized peoples. In New York City one hundred years ago one person in every three or four died of consumption, while to-day, in spite of the density of population, only one in seven succumbs to it. In 1881 the death rate was 4.27 per 1,000 inhabitants; in 1902 it was but 2.29. The general death rate has also fallen in the same time from 31.04 per 1,000 population to 19.49. In comparing these figures we find that the general death rate has decreased in the time 37 per cent, while the rate for tuberculosis has decreased 47 per cent. This would seem to be influenced by the fact that the cause of the disease is known, and that the health authorities have taken active measures during recent years to eradicate it. What is true in New York City is also true elsewhere. In England, Germany and wherever measures have been taken, either direct or indirect, for combatting consumption, we find a marked lowering of the death rate. If this much can be accomplished without the aid of, and, I might say, in spite of, the people, what might we hope to accomplish by united effort?

The prevention of consumption depends on (1) preventing the well from becoming infected, (2) proper management of the afflicted, so that they may be cured before they reach the consumptive stage.

In order to discuss prophylaxis intelligently, we must understand etiology. There are three factors in the etiology of tuberculosis which deserve our attention: First, the soil; second, the bacillus; third, influences which lower the normal protective powers of the cell.

Soil.—In our discussion of this question, contrary to custom, I will put soil first, because I believe it is of prime importance. We have been prone to think of the tubercle bacillus as being the cause of tuberculosis, and have thus neglected to emphasize one of the most important factors in the prevention of infection, viz.: that there will be no disease, even though the bacilli be present, unless the soil is suitable, unless the body cells lose their natural resisting power. It is even questioned whether the pathogenic state is the natural state of the disease-producing germ. "The pneumococcus is often found in great numbers in the air passages of healthy persons; the diphtheria bacillus in healthy throats and the Eberth bacillus in the intestines of normal individuals. The bacillus coli lives naturally in the normal intestine, and produces no trouble; but, let an inflammation ensue and it becomes a dangerous organism." As it is with these, so is it with the tubercle bacillus. Human beings are constantly coming in contact with tubercle bacilli. They are breathing them into their air passages and swallowing them with their food. Doubtless there are very few people who live to adult life that do not have tubercular lesions somewhere within

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their bodies; yet only a small percentage of these ever develop tuberculosis to such a degree that the disease is recognizable on ordinary examination.

This means that man is naturally antagonistic to disease. His cells are possessed of defensive powers which, under ordinary circumstances are capable of protecting him from invasion. Neither pneumococci, diphtheria bacilli, typhoid germs, colon bacilli nor tubercle bacilli are harmful under natural conditions. Nature's defenses are sufficient, unless weakened. Hence the condition of the individual cells of the organism, the soil, is of paramount importance.

Bacilli.—While we recognize the tubercle bacillus as the specific cause of tuberculosis, yet it is very questionable whether it is capable of producing infection in a healthy individual, unless it be from a very virulent culture or the inoculation be one of great numbers. Nevertheless the fact that it is the specific cause of the disease makes its destruction an important factor in prevention.

Influences Which Lower the Normal Protective Power of the Cells.—If germs are not naturally pathogenic, or, if they are naturally so but are unable to exercise their power as long as the body cells possess their natural resistance, then those things which depress cell activity or injure the cells of the organism must be taken into account. Whether or not either of these conditions is true, there can be no doubt but that measures which lower vitality count immeasurably in aiding infection.

Bearing in mind these three etiological factors in the production of tuberculosis, we can formulate plans for its prevention. That portion of the population which is not suffering from consumption tries to throw all the burden of prevention upon the afflicted. This is wrong. It is unscientific. It is shifting a responsibility upon the sick which, to a great extent, rightly belongs to the well. If the spread of consumption is to be prevented, it is as much the duty of the well man to preserve the natural resisting power of his body cells (keep the soil unsuitable for infection) as it is for the afflicted to avoid scattering infectious material.

This can be done by living a natural hygienic life. Sunshine, fresh air, good food, cleanliness, proper regard for the functions of the various bodily organs and good habits will do much toward preserving the natural defensive powers of the body cells. This is an individual matter, and should not be shifted. The common fear of the consumptive entertained by those who are not afflicted is analogous to the apprehension of a farmer who has no fences around his grain fields, and spends his time worrying lest his neighbor's cows destroy his crops. Common sense would say, "Build fences." And I would say to those who are suffering from phthisiophobia: "Build fences. Protect yourselves against infection by keeping your body cells in a state of high resistance; then, if some unfortunate victim of consumption chances to bring infectious material in contact with you, you will be secure." It is better for each one to do what he can to protect himself rather than to throw the entire burden of prevention upon those who are afflicted. I would not counsel any carelessness upon the part of those who are ill, but I would make health doubly sure by having the soil unsuitable and the seed destroyed.

Since all do not live hygienic lives, it is well to teach the people those things which lower vitality, that they may avoid them. A careful inquiry into the history of tuberculous patients reveals a condition of mental or physical depression preceding or coincident with infection in a surprisingly large number of instances. These conditions lower the normal resistance of the cells and allow the bacilli to overcome the host. Such conditions are:

1. Physical. (a) Overwork, especially under bad hygienic conditions. (b) Overcrowding in rooms badly

ventilated and poorly lighted. (c) Underfeeding. (d) Excesses, especially alcoholic and venereal. (e) Disease.

2. Mental. (a) Worry over real or imaginary troubles. (b) Depression from other causes.

Some of these conditions involve questions of an economic, some of a social and some of a moral nature, while others are matters of individual peculiarity. Much could be accomplished in overcoming some of these by the enactment of wholesome laws. A maximum number of hours should be designated as a day's work, varying according to the ages of the workers and the character of work done. Workshops, offices and dwellings should have certain requirements as to floor space per occupant; a certain standard of ventilation, and they should be so constructed that a maximum of sunshine would enter the buildings. The poor should be discouraged from crowding together in the tenements of cities, and encouraged by low rents and cheap and rapid transportation to make their homes in the suburbs, where cottages can be constructed on lots sufficiently large to allow sunshine and fresh air to keep them pure and wholesome.

Education will do much to overcome some of these depressing elements, while others are purely within the jurisdiction of the physician as such. Those diseases which are known often to be followed by tuberculosis, such as pneumonia, la grippe, typhoid fever and measles, should be treated more carefully than they frequently are. A delayed recovery should be carefully inquired into, and should put both physician and patient on his guard.

The next problem in the prevention of the spread of tuberculosis is the one which is usually considered, viz.: the destruction of the bacilli. This is largely a matter of education and honor. Whether or not this shall be accomplished depends almost entirely upon the medical profession. They must educate the people to an understanding of the necessity of such a measure, and must also see that it is carried out. This requires upon the part of the members of the profession:

1. Accurate knowledge of the method of scattering infection.

2. Ability and a patient determination to detect the disease when suspected.

3. Frankness in dealing with tuberculous patients, so that they may be apprised of the nature of the disease, and not soothed by such deceptive terms as "throat trouble," "bronchial trouble," "malaria," etc.

4. Consciousness of the enormity of the tuberculosis problem, and a determination to use their influence, not only with the patients, to see that they are careful, but with the administrative authorities, to see that proper assistance is provided for those who will not be careful of their own accord. In order to prevent the bacilli which are cast off by a tuberculous patient from becoming dangerous to others, rules for careful disinfection of the sputum or other bacillus-bearing discharges must be observed. For this to be done the patient must be told of the nature of his disease, and there must be someone to instruct him.

For the well-to-do this can and should be done by the family physician; but for the poor (and the great majority of tuberculous patients are poor) some other provision must be made. This naturally and rightly falls to the health officer. But how is he to do it unless he knows where these patients are? So the next important step is notification. I believe that notification should at first be voluntary, and that the physicians should be educated and interested by occasional circulars from the health department. *Notification should not be for quarantine, but for instruction.* The patient should understand that the health authorities are his friends, and that they wish to instruct him how to care for his sputum, that he may not re-infect himself or those about him. Health

boards should provide physicians with blanks for reporting cases, upon which they should signify whether the health authorities are to visit the patient and instruct him or whether they would attend to it themselves. In this way there would not be anything of a meddlesome nature in notification.

To carry out this work as it should be several assistants would be required, whose duty it would be to visit the tuberculous and give them instructions in hygiene, disinfection and general measures of prevention. In no way could this be accomplished better than by a municipal tuberculosis dispensary. The number of tuberculous patients who report to the physicians is a very small proportion of the number ill; but if the municipality would establish a free dispensary, where the poor could report for instruction and help, and have connected with it a corps of trained nurses who would instruct the afflicted and visit their homes and help to make them hygienic, it would rid the tenements of many sources of infection. Such a dispensary should also provide spitcups and disinfectants; and it would be an act of mercy if such foods as milk and eggs could be given to those who were in need of them.

Such a dispensary would be visited by many who could be restored to a degree of health, where they would be capable of self-support for years, and many who would fully regain health if they could but have an opportunity, and by many whose chances of life are few, but who would scatter infection if allowed to remain in their miserable quarters. For the former there should be sanatoria, where skilled treatment would restore them to their wage-earning power; for the latter, hospitals where they could spend their last days under hygienic surroundings. The expense thrown upon the municipality and state for the care of those who become their wards through the effects of this disease would doubtless go far toward maintaining such institutions.

Another manner in which the general medical man may render efficient service in the prevention of the spread of consumption is by acquainting himself with the early signs of tuberculosis, and learning to make an early diagnosis. It is conservative to say that if the disease were diagnosed as it can be in its very incipency, at least 75 per cent could be restored to health by intelligent treatment. Think of what this means from the standpoint of prevention! Seventy-five per cent of the sources of infection could be eliminated by early diagnosis and treatment!

It is a sad fact that patients do not present themselves for examination at this favorable time as often as they should; but let us be sure that we recognize the disease when they do come. Family physicians should always bear this disease in mind, and then if any member of the families in which they are called shows suspicious symptoms, it would be a kindness to carefully examine them.

In this short discussion of one of the most serious problems before the medical world I have endeavored to point out the part to be played by the general practitioner. From our discussion it can readily be seen that if the disease is to be checked, it must be done largely through his efforts. From his superior knowledge of matters sanitary, and from his superior opportunity, owing to his close relationship with the family, he should, and he must, take the lead in this great work. He must be a strong educational force. It is his opportunity to inculcate into the minds of his friends and families the correct ideas of the disease and its prevention. It is his to insist upon the well remaining so, and upon those ill of the disease taking precautions to prevent infecting others. It is his to teach the people the necessity of an early diagnosis, and it is his to be able to make it. It is his to form public opinion upon this great question, and urge upon the administrative authorities those

measures which are necessary to check the spread of the disease.

In the name of humanity, for which our noble profession was called into existence, let medical men take up this neglected cause. I am not an alarmist. I do not believe that this great state is in danger of becoming overrun with consumptives. I have too much faith in the common sense of the medical profession and the people as a whole to entertain such an opinion. The cause of tuberculosis is known. The methods of prevention are understood, and wherever put into operation have proved effective. The death rate from the disease is on the decline, and if we will but act as well as we know, many of us may live to see the "great white plague" shorn of its power.

OBSERVATIONS UPON SANATORIA FOR PULMONARY TUBERCULOSIS.*

By JOHN C. KING, M. D., Banning.

I HAVE no intent to decry the institutions referred to in my title. Properly located, equipped, conducted and restricted they merit professional support. It is well, however, to emphasize the fact that the evolution of the sanatorium, from the merely experimental to the ideal, is not yet complete. Future experience, even more than past achievement, must determine the relative value of sanatorium methods and the class of patients best adapted to them, together with many other important problems.

Like other useful innovations, sanatoria have become a "fad." Indiscriminate praise has generated an enthusiasm that reminds one of the optimistic reception accorded by our profession to former new procedures and remedies. Numerous medical men, unhampered by special training, are establishing institutions everywhere, and are appealing to their brethren for patients to fill them. The apotheosis of the sanatorium has also been taken advantage of by gentlemen whose commercial instincts are keen but who are deficient in ethical culture. One has a health camp on the desert, another an elegantly equipped building in the city. These appeal to the laity direct, through all the well-known advertising channels. More than twenty years ago I was obliged to relinquish my practice in the East on account of tuberculosis of both lungs. Ever since then I have especially studied medical tuberculosis. Twenty years ago the accommodations for tubercular invalids were almost *nil* in Southern California. For instance, at that time no room with fire or in any way heated was provided by any Los Angeles hotel. I am confident that a larger percentage of tuberculosis was cured then than now. It is, of course, impossible to prove such an assertion; nevertheless, I am sure results were better under primitive conditions. As the open air or tent was superseded by the cloth-lined "shack"; it, in turn, by the comfortable, plastered house, and it, finally, by the luxurious building with uniform heat and indoor toilet; as these changes took place the net results became poorer. I find myself in practice reverting more and more to the primitive tent life—becoming more and more afraid of the new building advertised as possessing "all modern improvements."

Our southern country is large and many-featured. Much acrimonious debate has arisen between localities as to which of them is best adapted to the needs of invalids. I am frequently asked, "Where is the best climate for consumptives?" I always reply, "There isn't any." There is always a best place for each individual, but never a "best place" for all. Of patients sent to me, I am obliged to send at least twenty-five per cent to some other resort. The great art is to select a location adapted to each particular

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patient. It is more of an art than a science. Long experience enables one to form a fairly accurate judgment as to whether a given patient will do better at a mountain altitude or below sea level on the desert; at the humid sea coast or in the arid interior. The different effects of the same climatic conditions upon two patients having the same disease, so far as the microscope can determine, is a fact. One may be favorably influenced thereby, the other made worse. A study of the physiological effects upon the healthy human being of varied temperature, humidity, altitude, etc., convinces one that each of these climatic elements has a therapeutic range of its own. No matter where a sanatorium for consumptives is located—in Northern New York or in Southern California—the climate will suit a certain number. The point is to select for each patient, not a given sanatorium, but the climate best suited to him in particular.

In this discussion the doctor becomes the all-important problem. Once in a society meeting I referred to the office of a prominent oculist. I spoke of its elaborate equipment with scientific apparatus, of its perfect adaptation to its purpose. I suggested that if its owner would transfer to me his office and his practice for three months I could make some money, and, incidentally, I could ruin more eyes than he could repair in a lifetime. The illustration is pertinent. A sanatorium is merely an instrument. Its value depends upon the doctor back of it. It is not a fetch to conjure with. No matter how elegantly furnished, how elaborately provided with sun baths and X-ray plants, with good climate and pneumatic cabinets, the cures depend upon the intelligence that utilizes these things. No matter how valuable they may be, they are merely accessories. Detweiler in the Black Forest, Trudeau at Saranac Lake, Von Ruck in Asheville—can one imagine surroundings more different! Yet each has succeeded. It is the man that counts, not the building, nor yet the climate. Let us send our patients to a man, not necessarily to a sanatorium.

So-called sanatorium treatment can be conducted outside as well as inside a sanatorium. In both cases the same drugs may be administered in the same manner. When necessary nurses of equal intelligence and training may guide, control or minister to the patient. The same daily supervision may be exercised by the attending physician. The same hygienic and dietetic regulations may be enforced. While it is true that certain patients enter into the spirit of sanatorium government, and are benefited thereby, it is also true that others are depressed by it, and react badly toward it. Some persons enjoy institutional methods, and are pleased to associate with other invalids. Others again do better segregated from sufferers like themselves, object to community rules and require regulations made personal to themselves. We ought not to assume that all should be sent to a sanatorium, or that none should be sent there. I plead for individualism. Send each where he will probably do best. Here, again, the art of medicine must be practiced rather than its science. It is impossible for the average pulmonary patient to remain many months in an expensive sanatorium; aside from financial considerations, patients chafe against inactivity. No matter what varied entertainment is provided, the ennui finally becomes intolerable. The hope is often proffered that a few months of sanatorium treatment will effect a cure. That hope is usually a cruel delusion.

There are two classes of patients. First, those in the so-called pretubercular stage. Their general health has become so undermined that they are in what may be termed a superlatively receptive condition, but no tubercle bacilli are present, nor have any classical symptoms of pulmonary tuberculosis developed. A few months' residence in a sanatorium,

or, and equally, a few months spent in quiet country retirement, under skilled medical direction, will restore them to health. These, however, are but a small proportion of those who come to our Southern California resorts. We meet only too few of them. The second class includes all who suffer from actually developed tuberculosis. With them the fight is not a question of months, but of years. The three-year relapse limit ordinarily applied to cancer is none too short for application to these patients. I have repeatedly seen the bacilli disappear from the sputum, temperature fall to normal, normal weight and strength return, and yet, after many months or a few years of excellent health, I have seen these patients succumb to the disease. Annually for some years I have had my share of advanced cases formerly pronounced cured at some sanatorium. Indeed, I am disposed to consider the twelve to twenty months following apparent cure as a very critical period in the history of the disease. A period during which the patient should remain under skilled medical supervision, and, if possible, in the climate and amid the surroundings in which improvement took place. I have frequently urged patients who were doing well to purchase a plot of ground and erect upon it a small cottage suited to their requirements. I have bestowed daily attention upon the minutest details of their lives for months after mere symptomatic recovery. As they became better I have induced them to cultivate their gardens, to become interested in live stock, in flowers, in chickens, in anything to prevent ennui and make life worth the living. After an additional year or two most of them were permanently cured. In fact, applying the three-year limit, these people show vastly better results than those pronounced cured and dismissed from professional care as soon as bacilli have disappeared and temperature has become normal. Many of these patients have returned to business in Eastern States, and have remained well for periods varying from three to fifteen years. Others can never leave the climate and surroundings in which they have recovered. For instance, the wife of a prominent official of the Pullman Company has been under my care about fifteen years. Bacilli disappeared from her sputum, she became the picture of health, absolutely no symptoms remained. And yet every time she has ventured to visit Chicago she has, within four weeks, developed fever, cough and hemorrhage. The point of this argument is the limitation of the sanatorium—in that it must, of necessity, lose the patient at a most critical time, that is, the time of apparent recovery.

There is one class of people—the poor—to whom the sanatorium is absolutely essential. Every practical medical man is familiar with the truth of this statement. Its truth does not depend upon the supposed fact that the sanatorium life is the best for those who have pulmonary tuberculosis, but upon the real fact that no other hygienic life is possible for the poor. From every standpoint, philanthropic, moral, financial, adequate provision should be made for them by the municipality or the state. "Adequate provision" implies sufficient accommodation to prevent those in process of cure from being forced out by new arrivals. Such institutions can only result from an aggressive campaign of education among the people. Meanwhile we cannot accord too much encouragement and praise to such efforts as the Barlow Sanatorium of Los Angeles and the health camp under the care of the Redlands physicians.

TUBERCULOUS PERICARDITIS.

Dr. George William Norris, in the *University of Pennsylvania Medical Bulletin*, gives the result of his studies on this subject, and reports its occurrence in 82 cadavers, out of 7,219 which have been autopsied in the Philadelphia hospitals.

HEALED AND QUIESCENT PULMONARY TUBERCULOSIS; AN ANALYSIS OF FIVE HUNDRED CASES, WITH REMARKS ON PLEURAL TUBERCLES*

By GEORGE BLUMER, M. D., San Francisco, and AUGUST JEROME LARTIGAU, M. D., San Francisco.

IN THE literature on pulmonary tuberculosis numerous contributions are to be found dealing with the spontaneous healing or retrogression of the disease. Some writers definitely speak of the process as "healing," while others speak of "retrogression" or "latency." It is apparent from this looseness of terms that it is necessary, in an article of this nature, to define what is meant by "healing" and what by "latency," or, as we have termed it, "quiescence."

We have considered four classes of lesions as indicative of healed or quiescent tuberculous processes in the lungs: 1. Sharply localized, usually depressed cicatrices, found, as a rule, at or near the apices of the lungs. 2. Encapsulated calcareous nodules. 3. Encapsulated caseo-calcareous foci. 4. Encapsulated caseous masses in which the surrounding lung showed no evidence of recent tuberculous changes.

As regards the tuberculous character of the two last named classes of lesions there can be no question. Both histologically and by animal experiment they have been proven to contain tubercle bacilli. Kurlow, by inoculating large numbers of guinea pigs, showed conclusively that all caseous and caseo-calcareous nodules are infective. Loomis and Dejerine have also found tubercle bacilli in a large percentage of caseous and caseo-calcareous foci. It is evident, then, that these foci, even when encapsulated, must be considered merely quiescent and not healed, and, in fact, it has been demonstrated postmortem that such foci may take on renewed activity and lead to rapidly fatal tuberculosis.

As regards the second class of lesions, also, the encapsulated calcareous areas, while absolute proof of their tuberculous nature is lacking, there is practically no doubt of it. Inoculation experiments with material from such areas have been uniformly unsuccessful, but it is quite easy to trace all the intermediate stages between a pure caseous and a pure calcareous area, and furthermore we know of no disease other than tuberculosis which is apt to produce calcareous areas in the lungs with the same frequency. Few other known processes result in such calcareous lesions.

As regards the tuberculous nature of the puckered cicatrices so frequently found at the apices there is some difference of opinion. Most of the modern writers, however, regard them as tuberculous residua. We have classed them as such, for the following reasons:

They are situated in almost all cases at the points near the apices of the lungs, which are the common sites of active tuberculosis. They are often associated with evident tuberculous lesions elsewhere in the lungs or in the bronchial glands. Histological examination shows in the immediate neighborhood of a certain percentage of them healing tubercle nodules. They have been found as the only lung lesion in cases which at one time showed clinical signs of active tuberculosis, but which healed before death (Laennec, Bennett, Jaccoud). Taking all this evidence into account, there seems to us no reasonable doubt that these scars represent healed tuberculous foci.

We have not included as evidences of healed tuberculosis old pleural adhesions or healed cavities. As far as pleural adhesions are concerned, we do not doubt that some of them represent healed tuberculous processes, as the work of Schlenker and others would indicate, but we know of no sure method of differen-

tiating those due to tuberculosis from those due to other causes. While we recognize the existence of healed tuberculous cavities, we have not considered them specially, as our series of cases contained none of this character.

Inasmuch as the great majority of writers consider the healed and latent cases together, we have thought it better, for purposes of comparison, to do the same. The following list shows the percentage of autopsies in which healed pulmonary tuberculosis is found according to different authors: Heitler, 4 per cent; Boudet, 5; Loomis, 6.1; Fowler, 9; Martin, 9.4; Coats, 15.2; Bollinger, 17.2; Vibert, 19; Staudacher, 22; Goldschmidt and Luxenberger, 24; Blumer and Lartigau, 28.8; Harris, 38.8; Massini, 39; Rogee, 51; Dejerine, 51; Boyer, 98.1; Aupinel, 100.

Perhaps the most striking point about these figures is the very marked discrepancies between the findings of different authors. It is evident that there must be some cause, or, more probably, a multiplicity of causes, to explain this. A reference to the method of compilation of the statistics, and the class and number of cases observed, explains much. In statistics like Heitler's, whose observations cover over 16,000 autopsies, routine autopsy records were used. The autopsies were made by many different individuals, some, if not most, of whom were doubtless not particularly interested in the subject under discussion, and healed tuberculous lesions were probably not especially looked for. Our own experience, and that of others, has shown that it is very easy to overlook many of these lesions unless special attention is paid to them. Then again there is a difference in the method of compilation of the statistics which we have endeavored to rectify as far as possible in the foregoing list. Some authors in calculating percentages exclude all cases of active pulmonary tuberculosis, while others include all cases autopsied. The above list, as far as we are able to verify it, refers to the percentage of healed tuberculosis in all cases. In Boyer's statistics, however, cases with active tuberculosis were not included. Another source of difference is that some statistics cover cases from hospitals with acute services; others, cases from hospitals which admit chronic cases, and still others, cases dead of accident or suicide. The most important factor, however, and one which is not particularly referred to in many reports, is the age of the subjects. The question of the relation of age to active and quiescent or healed tuberculosis will be considered later; in a general way it may be stated that the tendency toward healing in tuberculous affections increases in direct ratio to the increase in age. This fact serves to explain the high percentages of healing of some writers. Thus Aupinel's sixty autopsies, with 100 per cent of healed tuberculosis, were all performed on old men. Rogee's cases, with 51 per cent of recoveries, were all old women. The source of Dejerine's material we have been unable to learn. Most of the material showing a moderately high percentage of recoveries was like our own cases, from varied sources or from a general hospital, and covering all ages. The factors above mentioned explain most of the discrepancies observed in the table.

The 500 cases analyzed by us were consecutive cases, and were all studied with especial reference to healed or quiescent tuberculosis. An analysis of our 500 cases from the standpoint of the character and the localization of the lesions gives the following results: Of 330 males, 94, or 28.4 per cent, showed evidences of healed or quiescent tuberculosis of the lungs; of 170 females, 50, or 29.4 per cent, showed evidences of healed or quiescent tuberculosis of the lungs.

The incidence of single and multiple lesions was as follows:

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

Sex		Single.	Per Ct.	Multiple.	Per Ct.
Male	94	56	59.6	38	40.4
Female	50	30	60.0	20	40.0

The character and localization were as follows:

*Scars, 111.

		Male.	Female.
At or near apex.....	106	78	28
Right lung	22	16	6
Left lung	40	26	14
Both lungs	44	36	8
At or near base.....	5	3	2
Right lung	4	3	1
Left lung	1	0	1
Right middle lobe	0	0	0
Calcareous nodules, 40.			
At or near apex.....	27	12	15
Right lung	9	4	5
Left lung	17	7	10
Both lungs	1	1	0
At or near base	11	8	3
Right lung	5	4	1
Left lung	6	4	2
Right middle lobe.....	2	1	1
Encapsulated caseous areas, 15.			
At or near apex	12	8	4
Right lung	8	6	2
Left lung	4	2	2
At or near base.....	3	2	1
Right lung	2	1	1
Left lung	1	1	0
Right middle lobe	0	0	0

It will be seen from the above tables that the situation of the healed or quiescent lesions corresponds, as would be expected, to the ordinary seats of active pulmonary tuberculosis.

An inquiry into the relation between the age and sex on the one hand, and the incidence of active and healed or quiescent tuberculosis on the other, gives the following results. This table covers 404 cases, in which the age and sex were determined. Of these, 266 were males and 138 females. Both sexes are considered together in the first table, and then each sex is taken up separately:

BIRTH	CASES	ACTIVE TUBERCULOSIS	HEALED TUBERCULOSIS
To 10 years	51	10 = 19.6%	1 = 1.9%
10-20 "	27	9 = 33.3%	4 = 14.8%
20-30 "	47	13 = 27.6%	6 = 12.7%
30-40 "	77	6 = 7.7%	14 = 18.1%
40-50 "	84	2 = 2.3%	33 = 39.2%
50-60 "	60	5 = 8.3%	32 = 53.3%
60-70 "	39	1 = 2.5%	27 = 69.2%
70-80 "	15	2 = 13.3%	7 = 46.6%
80-90 "	3	1 = 33.3%	2 = 66.6%
90-100 "	1	0 = 0%	1 = 100%

MALES, 266.

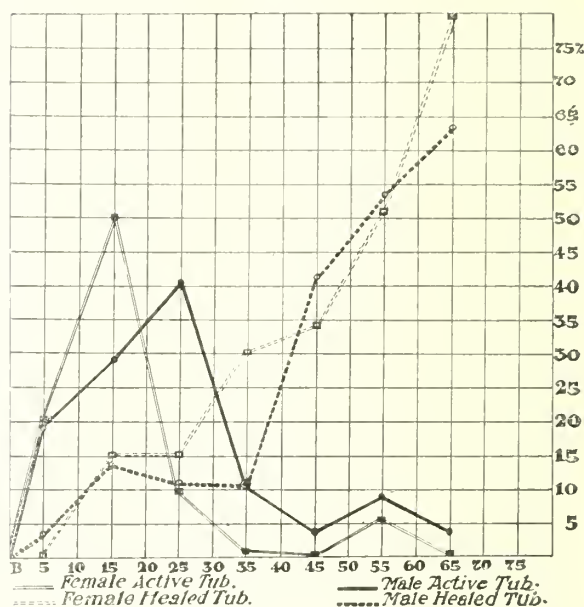
To 10 years	31	6 = 19.3%	1 = 3.2%
10-20 "	21	6 = 28.5%	3 = 14.2%
20-30 "	27	11 = 40.7%	3 = 11.1%
30-40 "	47	5 = 10.6%	5 = 10.6%
40-50 "	58	2 = 3.4%	24 = 41.3%
50-60 "	41	4 = 9.7%	22 = 53.6%
60-70 "	27	1 = 3.7%	17 = 63.3%
70-80 "	11	1 = 9%	6 = 54.5%
80-90 "	2	1 = 50%	1 = 50%
90-100 "	1	0 = 0%	1 = 100%

FEMALES, 138.

To 10 years	20	4 = 20%	0 = 0%
10-20 "	6	3 = 50%	1 = 16.6%
20-30 "	20	2 = 10%	3 = 15%
30-40 "	30	1 = 3.3%	9 = 30%
40-50 "	26	0 = 0%	9 = 34.6%
50-60 "	19	1 = 5.2%	10 = 52.6%
60-70 "	12	0 = 0%	10 = 83.3%
70-80 "	4	1 = 25%	1 = 25%
80-90 "	1	0 = 0%	1 = 100%

*These figures refer to the number of lesions, not the number of cases.

It will be seen from the above tables that pulmonary tuberculosis shows very little tendency to heal during the first twenty years of life; after that, however, the active cases decrease with almost uniform certainty, while the healed or quiescent cases increase in approximately the same ratio; this and the relation to sex are well shown in the accompanying chart. There is apparently a slight tendency, judging from our figures, for the active form to increase and the healed to decrease after the age of 65, but the number of cases in our series over 70 is so small that we feel hardly justified in concluding that this is the case.



A comparison of the tables for the two sexes shows that in the female the tendency toward healing occurs much earlier than in the male, as does the maximum incidence of active cases. This, perhaps, might be expected from the earlier development of the female.

We have been unable to find any observations bearing on the question of the relation of sex to the incidence of active and healed or quiescent pulmonary tuberculosis, but the publications of certain writers as regards the effect of age are of interest in connection with our results. Goldschmidt and Luxenberger give figures covering three years' work in the Munich *Poliklinik* with regard to the average age of men and women dying from pulmonary tuberculosis. The average age of the men was just 39 years; that of the women, 32.7 years. Heitler states that, judging from his statistics, the tendency to healing shows a gradual increase up to the age of 60 years. After this age the number of cases observed was too small to warrant the formulation of accurate data. Harris' statistics from 20 to 70 years of age, with regard to percentage of healing, are as follows: 20 to 29, 26.9 per cent; 30 to 39, 31.4; 40 to 49, 47.2; 50 to 59, 42.3; 60 to 69, 50.

The statistics of Coats, and the more recent ones of Naegli, both of which series are not confined to pulmonary tuberculosis, but cover all forms, are also interesting from this point of view.

Coats summarizes his figures on this phase as follows:

Under 40—Active tuberculosis, 64.5 per cent; healed tuberculosis, 29.25 per cent. Over 40—Active tuberculosis, 35.5 per cent; healed tuberculosis, 70.75 per cent.

Naegli's figures are based on very careful examinations, covering 500 autopsies. His figures show:

Under 18—Active tuberculosis, 12.5 per cent; healed tuberculosis, 4.5 per cent. Over 18—Active tuberculosis, 26.1 per cent; healed tuberculosis, 69.7 per cent.

Most of Naegeli's cases were in adults, and those in children were such cases as would enter a general hospital, so that the actual percentage of children reported as tuberculous is probably too low. Nevertheless the figures serve to show the ratio between active and healed or quiescent tuberculosis in children.

The recent work of Hodenpyl has called attention to miliary tuberculosis of the pleura, and as this is almost exclusively confined to the visceral pleura, and shows marked tendencies toward healing, we have investigated 108 cases with regard to its occurrence. Hodenpyl's work showed that in nearly 50 per cent of adult lungs there were present, usually just under the visceral pleura, miliary tubercles in greater or less number. Some cases showed only one or two nodules; others showed hundreds of them. In some instances these nodules seemed to bear a causative relation to tuberculous pleurisy, but in the great majority of cases they tended to become fibrous, and this is so frequently the case that they have been described as miliary fibromata of the pleura by some authors. Hodenpyl demonstrated that they had the microscopic structure of tubercles, and that they contained in some instances tubercle bacilli. According to Hodenpyl, Weigert is the only other writer who has touched upon this subject, and he barely mentions it. He notes, however, the difficulty of distinguishing such tubercles in their later stages from fibromata.

The 108 cases investigated by us were adults between 19 and 72 years of age. None of them were the subjects of active pulmonary tuberculosis. From previous and our own investigations we have taken for granted that the majority of these nodules are of a tuberculous nature, though this was not absolutely proven in all instances. Of the 108 cases, pleural tubercles were found in 61, or 56.4 per cent. In 56 cases the tubercles were on the visceral, and in five on the parietal pleura. They occurred on the right side in 27 cases, on the left side in 19, and on both sides in 15. Tubercles from 38 of the 61 cases were subjected to histological examination, and were shown to present the usual histology of tubercle. Seven of the nodules were inoculated into animals, all of which subsequently developed tuberculosis. In only one of this group of seven could tubercle bacilli be detected microscopically, and then in but small numbers. These findings corroborate Hodenpyl's, and indicate that by animal inoculation probably the greater number of these pleural tubercles can be shown to contain tubercle bacilli.

As a result of these observations on pulmonary and pleural tuberculosis we conclude:

1. Healing and quiescence of the tuberculous process are very frequently observed in the lungs of individuals coming to autopsy.

2. Up to the age of 18 or 20 years there is very little tendency to quiescence, and still less to healing.

3. From the age of 20 on, the tendency to healing becomes greater and greater, so that in old individuals a very large percentage of autopsies may show evidences of it.

4. The tendency toward healing or quiescence begins earlier in women than in men, while the point of maximum incidence of active pulmonary tuberculosis is also reached earlier.

5. Miliary tubercles of the pleura are of frequent occurrence.

6. They usually undergo fibrous transformation, but it is probable that many of them still contain active tubercle bacilli.

DISCUSSION.

THE REPORT OF THE COMMITTEE ON TUBERCULOSIS AND THE FOREGOING PAPERS BY DRs. POTTENGER, KING AND BLUMER AND LARTIGAU WERE DISCUSSED TOGETHER, AS FOLLOWS:

Dr. George L. Cole, Los Angeles.—It is a very pleasing thing to me to see the prominence given to this question of tuberculosis. It is only a few years ago that any paper read upon tuberculosis simply meant a vacant room. Now the room is well filled. It seems to me that it is along the line of preventive medicine, as medicine is about to resurrect itself from a sleep of years. We have made a good beginning. We are talking about the prevention of tuberculosis now; yet 125 years ago in Italy and southern Europe, where the patients went down from northern Europe, they were talking of just these same questions. They even then had laws requiring the reporting of cases, and fines were imposed for the non-reporting of tuberculosis. But for years after, the profession went to sleep again, and has just awakened. Now, because of the advance of bacteriological work, we are on firmer ground. With regard to these papers which have just been read, they have covered the ground very thoroughly. Dr. King spoke of sanatoria as a fad. It is, I think, one of the good fads. My regret is that it is not more of a fad. It is not as popular as it might be. Sanatoria have been advocated for over fifty years. What Dr. King said about their being installed in the city by one man and in the desert by another is a fact that works itself out pretty well. Sanatoria for tuberculous people are not popular in cities. They must be out in the mountains or somewhere away from the city. What he has said about sanitation in this country, would be hard to prove. Still the death rate is not lessened by sanitation. I can hardly see how properly heated rooms could increase the death rate. It is true that a certain way of heating rooms is objectionable. This is a warm climate, and the ordinary way is the little oil stove, which ought to be kicked out. But how proper sanitation and heating with warm air can be otherwise than beneficial I do not see. What he said about the doctor in the sanatorium is very true. I have in mind especially Dr. Trudeau of Saranac. Had he been placed in a different climate in starting that sanatorium how much more good he could have done. He has been a strong man in tuberculosis. With regard to the paper read by Dr. Blumer, in which I was very much interested, what he said about age in relation to tuberculosis bears out the fact which I have always observed, that older people tolerate tuberculosis better than young. His mention of tuberculous pleura seems to carry out a general impression that tuberculous pleurisy is rather of the benign form of the disease. We see patients with a little pain in the side; we diagnose it as pleurisy; they get pale and anemic; they go on for a year or two under our care without any symptoms, then they have another attack; yet they go on and on to old age, and die of something else. Statistics on tuberculosis, as a rule, do not count for much. The committee on tuberculosis has tried to be very fair in getting at our statistics with regard to the disease in California. Dr. Pottenger has said many wise and true things. There is one thing that we hardly take into consideration, that is, the natural susceptibility or practical immunity of some people toward tuberculosis and the bacilli of tuberculosis upon certain soil. You cannot make it grow any more than you can make wheat grow in certain soil. It simply will not grow. You may implant it in the system of another person and you cannot prevent its growth. We can have five children in the same family exposed to measles or scarlet fever. One does not contract it, but the other four will take it. We must try to elevate the

standard, but we must not forget that some people are more susceptible than others. With regard to this report on tuberculosis, it is interesting to see that the largest number of physicians seem to agree upon one topic, and that is that we should have a campaign of educating the public. One hundred and fifty-three agreed to that. Let education precede legislation. I think that it is quite time that this society should be put upon record as being opposed to quarantining the state of California against tuberculosis. There is no reason for barring the people from coming here. Let us go on with the education and there need be no question of quarantining the state.

Dr. J. H. Parkinson, Sacramento.—In Dr. Pottenger's paper there was one point which is excellent: the patient must understand and the friends be made to understand the true nature of the disease. We should always insist upon it, by bacteriological examination. The education of the public is, of course, the whole point in this matter, and in connection with that point is this: that the public does believe in heredity and in the infection of this disease. These two points—heredity and infectiousness of the disease—should be brought up and an understanding insisted upon. To instruct the public is the great point. Through the Board of Health it can be done. Compulsory notification should be also taken up. Tubercular patients should be located and instruction given to them. Another point is to prove to the public that there are a great many forms of tuberculosis which are pathologically identical. Tuberculosis of the knee or spine and of the brain, and pulmonary tuberculosis, are identical; and you can have infection from the spine to the lung, or lung to knee, etc., as the case may be. I have a case where pulmonary tuberculosis has resulted in an infection of the spine in a child. I did what I could to prevent it. The child of the sister of this one is now dying from spinal tuberculosis. Education is the main thing; notification should be carried out by the profession.

Dr. Edward von Adelung, Oakland.—I was interested in the point brought out in Dr. Cole's discussion in regard to statistics. Of course the committee on the tuberculosis subject had to deal with some statistics, and we did the best we could. But it reminds me of a little piece of poetry which runs:

"There was a young lady from Sky,
Who had a figure like the letter I.
She said, 'It is too bad, but then I can pad,
And show that figures lie.'"

I was interested in the presentation of the paper which involved this chart. We will find that the post-mortems always give us the facts. There was a question in Dr. Pottenger's paper relating to physicians and their assistants in health office work in controlling tuberculosis. Physicians neglect to report these cases because of the relation between the patients and the doctors. It ought to be generally known that the reports of these cases are private, and are kept so; and if this is impressed upon the physicians and the patients, I think that after a while physicians will report them as they get them. Another point that is given slight attention is the resistance to the disease in question. More attention should be given to the diseases that prepare the system for invasion of tuberculosis. Measles is one of the diseases, and it is regarded as an insignificant disease, not only by the laity, but also by the profession. That point should be impressed upon everybody, because measles is a most serious disease. You will find that measles is a dangerous disease; dangerous because it has certain sequelæ. The ignorance that is prevalent fails to connect a disease that follows months or years after. A child has the measles, and gets well. It has an otorrhea that dries up, and later

we have a chronic otorrhea, which is probably due to the measles, and is tubercular, leading to tubercular brain lesion and death. It is our duty not only to encourage fresh air, exercise and sunshine, but also to take due notice of diseases which prepare the system for the invasion of other diseases. We need jarring on the subject. Some parents desire that their children shall have measles and other childhood diseases and get over them, and at the same time, unfortunately, the family physician too often advises that very thing.

Dr. Elizabeth Follensbee, Los Angeles.—I am a teacher, and I do not think that I have allowed a class to go out from under my instruction without telling them to never say that it is "only measles," or "only whooping cough." Dr. von Adelung has covered his subject very thoroughly. I wish that every physician would realize the fact of the seriousness of this trouble. Measles should not be looked upon as an unimportant disease.

Dr. A. Barkan, San Francisco.—I was interested to hear the point made about the system of dispensaries for tuberculosis. I am sure that the reader of that paper has noticed that in France and Belgium the authorities have had the system of dispensaries carried on for seven years past. The point is well worth considering. Another point with regard to tuberculosis of the ear. The temporal bone is just as often the seat of tuberculosis as any other bone of the body. The disease commences with an otorrhea, oftentimes of chronic character, beginning with hardly any pain and little discharge; rarely can the bacillus be demonstrated, but the ears go on in a comfortable way, but at the same time a persistently "running ear." The discharge never ceases. The case are very favorable for treatment. The temporal bone and the seat of the disease can be gotten at and the disease thoroughly eradicated and the patient benefited. I think in all cases of otorrhea the ears should be examined carefully with the view of their being of tuberculous origin.

Dr. E. E. Kelley, San Francisco.—There are two points I would like to call attention to. In the first place, we have to send away a good many of our patients. The point made by Dr. King that we must choose the place where they should go is very vital. Some patients had better be in low localities, some at the seacoast, and some in high altitudes. We must certainly study the patient, and send him to the climate for which he is specially adapted. Another point is this: Not only because of the danger of tuberculosis, but because of the danger of various other infectious diseases, there ought to be laws compelling the disinfection of tenement houses when people move out. They move out and do not disinfect the houses; other families move in and rapidly become subject to the disease. A very interesting illustration of this fact was published by the San Francisco Board of Health, in which there was a table of the cases occurring in Chinatown. Seventy-five per cent occurred within a few blocks, and other blocks were immune from the disease. This is a positive proof that the disease occurred in the same houses on account of their not being disinfected.

Dr. J. C. King, Banning.—Along the line of education of the public by the general practitioner, I would like to say that in the very small community in which I live, I think for several years there has not been a tuberculous patient who has died where the room and larger part of the premises have not been subsequently thoroughly disinfected. There is no law there, but it is simply a matter of cultivation and education of the people to that point. It has become such a necessary thing that one man has added to his business the necessary apparatus for disinfecting with formaldehyd. He charges so much per room for going around and attending to that business, and it

has become quite a source of income to him. In a little community where there is no health officer and no effort from officialism this illustrates how much can be accomplished.

Dr. George Blumer, San Francisco.—Just a word regarding Dr. Cole's remarks relative to statistics. Statistics have a place if properly carried out. With regard to the importance of the heredity of the soil. A number of papers have recently gone over this question. In a paper by Miller, while he does not entirely disapprove of heredity, he thinks more attention should be paid to contamination by contact. He shows that in families where the father is tuberculous, for instance, the chance of transmission of infection to the child is less; where the mother is tuberculous the child becomes tuberculous in larger proportion than where the father is tuberculous. The father is away most of the time, and not brought into contact with the child. Another question is early diagnosis in these cases; this has been impressed upon me by a large number of sputum examinations. The general practitioner, as a rule, expects to find typical bacilli in the sputum before making a diagnosis. In some of the large German sanatoria all the way from 60 to 80 per cent of cases coming in have no tubercle bacilli in the sputum. So that if you wait until the patient's sputum contains bacilli, you wait until the disease has progressed too far. They rely in these cases upon the physical signs and upon the tuberculin reaction.

Dr. F. M. Pottenger, Los Angeles.—I am glad that Dr. Blumer brought out his point with regard to early diagnosis. Early diagnosis has been one of my fads. I believe that the diagnosis of tuberculosis should be made by the clinical history and physical examination. It should be so made in a great percentage of cases. I do not believe in waiting for the microscope. The microscope has done great good, but on the other hand a great deal of harm, in the fact that it has made physicians rely upon it for diagnosis. Physical diagnosis has degenerated somewhat on that account. With regard to climate, there is no specific climate for tuberculosis. The best place for tuberculous patients is where they can have the most intelligent care, pure air and good food. I believe in climate; but everybody cannot take advantage of climate. If you can, go to a good climate; but it is not necessary to send the patient away from home. Regarding sanatoria for tuberculosis, I do not believe there is any better place anywhere than in a well-conducted sanatorium. I think that Dr. King has brought out that point. It is not every man who can start a sanatorium. The patients go to a sanatorium because of the man at the head of the institution. A man must throw his soul into the sanatorium to make it a success. Regarding the soil, the point is this: we should look more toward keeping the body in a high state of resistance. I believe in taking every precaution that can be taken. The French dispensaries have been a great success. A dispensary is really better than a sanatorium. Every city should have a municipal dispensary. With a campaign of education, teaching the people, then putting in sanatoria and dispensaries, I believe we can relegate tuberculosis to a thing of the past. House infection has been brought out. This subject has been studied in New York and Philadelphia. It is shown that there are certain houses which show infection within a certain time. These houses which show it, show cases coming up one after another for a long time. There are 325,000 rooms in Greater New York which have not a room or window for ventilation. San Francisco and Los Angeles will be just such places unless the medical profession take it into their own hands. The city council does not consider these things. The medical profession should guide the people in these matters of health.

THE ADVANTAGE OF MULES OPERATION OVER SIMPLE ENUCLEATION.*

By REDMOND PAVNE, M. D., San Francisco.

THE loss of an eye, because of its effect upon the general appearance of a patient is a great hindrance to him in almost every walk of life, so just as we succeed in making his appearance the more natural, we add vastly to his chances of success and happiness. After simple enucleation the orbit presents a large, deep cavity with great recession of the lids. There is a great deal of mucus secretion collected which cannot drain out; this macerates the lashes, and produces a more or less repulsive appearance. With the usual prothesis this cavity is at best only partly filled. The enophthalmus is always apparent, frequently quite marked. There is always more or less collection of mucus and the mobility of the artificial eye is slight, while in children the development of the orbit is hindered.

Now when Mules operation is done, that is, the cornea amputated at the limbus, the sclera eviscerated and a vitrified glass ball enclosed, the orbital cavity is completely filled. There is an absence of enophthalmus, tears and secretion, the mobility of the eye is better than with any other method, and what is very important in the young, the orbit is said to continue to develop. The cosmetic effect is so vastly superior, either with or without the artificial eye in place, that I think this method should always be selected where there is no contra-indication.

The glass ball has been used some 15 years now and no case reported of its having been broken. The gold ball has no advantage, the silver ball produces argyria and the aluminum disintegrates, producing irritation, and is finally extruded. About the only absolute contra-indications would seem to be intra-ocular growths, eyes which have already excited sympathetic ophthalmitis and advanced atrophy of the globe. It has been used successfully in almost every other condition. Glaucoma seems no contra-indication judging from the cases reported; and in the hands of some, the results were highly satisfactory in suppuration of the globe. For the present, however, I think I shall regard this latter as a contra-indication. I have made the operation something like a dozen times now without failure—that is, regarding failure as the escape of the glass ball, sympathetic ophthalmitis, or an irritable stump, as these are the cases of failure so far reported. The escape of the glass ball is prevented, I think, by care in selecting the size, and adopting very simple operative technique, thus getting only slight reaction and less tension on the sutures. Sympathetic ophthalmitis has not happened with me, for I have been careful to keep well within the indications of the operation. The irritable stump which has happened with some operators seems to be due to the im-

* Read before the San Francisco Society of Eye, Ear, Nose and Throat Surgeons.

bedded sutures used to bring the scleral wound together. This I think I have avoided by using the silk sutures, bringing conjunctival and scleral wound both together, and using care to coaptate the cut edges of both. It heals readily, requiring ten days, and by that time many of the silk sutures have cut out. I have not found any occasion for the separate scleral sutures, hence there are none imbedded to produce an irritable stump.

The cases selected for the operation have been the following:

Case I—The whole cornea a large white cicatrix, following gonorrheal ophthalmia.

Case II—Hemorrhage glaucoma. Account of an old injury producing dislocation of the lens, traumatic cataract, etc. Eye continually painful. Not relieved by scleratomies.

Case III—Old iridocyclitis. Painful, tender eye. No vision.

Case IV—Large staphyloma of anterior segment of eye protruding between lids.

Case V—Acute iridocyclitis due to slight blow to eyeball, one year after extracting piece of steel.

Case VI—Hemorrhagic glaucoma, due to recent blow upon the eye. Eye continually painful. Not relieved by scleratomies.

Case VII—Large white cicatrix of cornea—strong convergent squint, producing much headache.

Case VIII—Extensive laceration of the anterior segment of the eye by wire; infected. No hope for a globe.

Case IX—Old iridocyclitis; but little vision. Eye painful. Inflammation recurrent.

There are two or three others, whose histories I cannot lay my hands on. I believe that Mules operation is not alone a justifiable procedure, but the one to be selected where no contra-indication exists, and that the more it is done the fewer failures we will have.

THE "GOOD THINGS" WE ARE!

The "patent" medicines sold to consumers will hold their own for a good many years to come, I believe. But the patent medicine of the future is the one that will be advertised only to doctors. Some of the most profitable remedies of the present time are of this class. They are called proprietary remedies. The general public never hears of them through the daily press. All their publicity is secured through the medical press, by means of the manufacturer's literature, sometimes gotten out in the shape of a medical journal, and through samples to doctors. For one physician capable of prescribing the precise medicinal agents needed by each individual patient there are at least five who prescribe these proprietaries. * * * The proprietary medicine of the future, though, will be advertised through these channels. The medical papers will reap the harvest, and the physician himself, always so loud in the denunciation of "patent" medicines, will be the most important medium of advertising at the command of the proprietary manufacturer. In fact, he is that to-day.—*Printers' Ink.*

[See editorial note, "Nostrums and Quacks," page 266.]

A recent investigation in Berlin shows that 60 per cent of the quacks who are doing good business were ordinary day laborers before they became so-called "benefactors of mankind"; that only 40 per cent had had an elementary common school education; that 85 per cent of the women had been servant girls, and that 30 per cent of the total number of quacks had criminal records.—Dr. O. T. Osborne, Address, A. M. A.

OPERATIVE FISTULÆ OF THE MALE URETHRA.*

By R. L. RIGDON, M. D., San Francisco.

IN OPERATING upon the male urethra through the perineum it has been my experience that a proportion of the patients do not make a wholly satisfactory recovery from the operation wound. In the large majority of cases the recovery is prompt and complete, but in rare instances delayed union is noticed, resulting in a fistula more or less persistent. This has come to me somewhat in the nature of a surprise, for from the reports of other surgeons it does not appear that fistula ever follows external urethrotomy. It is quite frequently mentioned as the result of an abscess, traumatism, tight stricture, etc., but does not seem to be credited as a possibility following operation. It is the purpose of this paper to present to you two cases illustrative of the condition mentioned.

In studying these cases I have endeavored to determine the cause or causes which have operated to produce the fistulae. It is well known that the escaping urine will follow the line of least resistance, whether this be through the natural channel, as is normally the case, or through accidental openings leading from the urethra. When an opening is made through the perineum into the canal it offers an easy line of escape for the oncoming flow, and the whole or part of the stream is diverted through this new channel. As union of the cut edges occurs and the opening becomes gradually smaller, the balance of resistance, which for the time has resided in the normal urethra, shifts more and more toward the artificial opening, until finally the urethra again offers the path of easier escape, and normal urination is established. Another factor to be taken into account is the direction of the stream in the urinary canal. The prostatic urethra is directed downward and forward, and is joined by the membranous urethra at a wide angle, and from this point the curve gradually passes forward and a little upward. The urinary stream following this canal will, because of its direction, tend to impinge somewhat upon the urethral floor, especially in the membranous portion of the canal; and if there is any breach of continuity in this locality, the urine will be directed toward it. Theoretically, then, a wound on the floor of the canal would be more readily kept open by the stream than would a similar opening on the upper wall.

The force with which the stream is delivered will, to a certain extent, determine the direction the stream will take. If the urine issues with considerable force, it will tend to shoot past any unnatural opening that may be present; but, on the other hand, if it is delivered slowly it will trickle into the mouth of a urethral wound, and find its way to the surface by the artificial route. The shape assumed by the urethral wound in process of healing may be such as to tend to direct the urine into its open mouth.

In the different portions of the canal the mucous and submucous tissues vary considerably in their degrees of firmness or laxity, as can be demonstrated easily by the endoscopic picture presented in the study of the normal canal. In one portion of the canal, especially the bulbous, the folding of the mucous membrane is very noticeable, while in the adjoining membranous urethra the tissues are much more tense. It is conceivable that an operative wound of the urethra might be located so that the urethral orifice would be at the junction of the membranous and the bulbous portions of the canal; and should a lax fold of the urethra in front of the opening rise up, as it does in the face of the endoscopic tube, it might easily tend to divert the urine into the unnatural opening. If in this supposed case there

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

should be a lack of force in the stream, from any cause, this tendency would be even more marked. Infection may play an important part in producing fistulae. Should the wound become infected, healing is delayed, and the formation of a false membrane is encouraged.

One other condition may be mentioned as perhaps tending to result in fistulae in these cases, namely, the use of the perineal drainage tube. Perineal drainage is very generally employed, and operative fistulae are very rare; hence I conclude that this cause is not a very potent one. I mention it, however, since it has occurred to me that the pressure of the tube on the surfaces of the wound might have a tendency to depress the posterior angle, where the pressure of the tube is naturally greater, below the level of the anterior angle, and so direct the stream of urine rather toward the wound opening and away from the urethra. It is possible, also, that if the tube is left in situ for any length of time the granulations forming around it may be covered with false epithelium, and in this manner prevent total closure of the wound.

Of course there are other causes that are influential in causing and maintaining general urethral fistulae; but in the class under discussion—operative fistulae—they need not be mentioned.

Case 1.—Mr. J., age 35, was operated upon for contracture of the vesical neck in October, 1902. The bladder was in a state of atony from frequent overdistention during the preceding months, and the urinary flow occurred in a very halting manner, even after relief of all obstruction. The patient went on to an uneventful recovery, and the perineal wound contracted until only a minute fistula remained; this has persisted to the present time. During February of this year I had an opportunity to examine this patient again. His general condition was good, but he complained of the escape of a few drops of urine through the perineal opening during the act of urination.

Only a few weeks before operating upon this patient I had operated upon another patient for a similar contracture, and after the third day urination through the normal channel was established, and thereafter no urine escaped from the perineal wound. The question naturally arose, Why should the wound heal so rapidly in one patient and be so long delayed in healing in the other? I satisfied myself that there was no obstruction in the anterior urethra in either patient, and also, by endoscopic examination, excluded any peculiarity in the position or condition of the urethral wound in the instance of delayed healing. I could find but two conditions that might account for the difference. In the patient mentioned as recovering so promptly no drainage tube had been used, and the bladder was of normal tone. In the instance of delayed union the drainage tube had been employed for ten days, and the bladder was in a condition of atony. In neither patient was there infection of the wound.

Case 2.—Mr. J. F., age 84. Operated upon for prostatic enlargement December 11, 1903, by the perineal method. The prostate was easily removed. A drainage tube was inserted through the wound and kept in situ for fourteen days because of the foul condition of the bladder. It was then removed, a catheter introduced per urethram into the bladder, and drainage established in that manner. The wound did not heal kindly, but the surfaces were covered with dirty grayish sloughs. These were thrown off gradually, and at the expiration of six weeks the perineal wound had contracted to the size of a large probe. This fistula has persisted to the present time. Only a small amount of urine escapes through it, but it is sufficient in quantity to greatly annoy the patient. The bladder has the power to expel its contents in a satisfactory manner, but there is some dribbling. Upon examination it is found that a small probe can be passed through the opening into the urethra, and that it is held quite tight by the constricting walls. The endoscope shows the position of the inner mouth of the fistula to be situated in the membranous urethra immediately adjoining the bulbous portion. The exact location is clearly determined when the probe is introduced, for with the endoscope its point can be seen emerging from the fistula. Just in front of the opening a fold of mucous membrane rises up, apparently offering a barrier to the onward flow of the urine. I am satisfied this is a normal fold of mucous membrane, but it stands

up so markedly as to suggest a casual relationship between its presence and the fistula. As mentioned before, there is present in this patient a tendency to dribbling of urine. I have thought that these slowly moving drops may be resisted in a small degree in their onward progress and forced, as it were, into the wound, thus retarding union. To the infection present for a time may also be attributed in part the reluctance to heal.

THE SYMPTOMS OF GLAUCOMA.*

By ALBERT B. McKEE, M. D., San Francisco.

THE general symptoms of glaucoma are common to all varieties, but vary much in intensity and in the predominance of certain symptoms over others, according to the type of the disease. The general division of glaucoma into primary and secondary is a natural one, while the subdivision of the former into acute, fulminating, sub-acute and chronic is more or less artificial, but conduces to a better understanding of the disease and a more correct application of the treatment. Secondary glaucoma occurs as the result or in the course of some other disease, causing damage to the eye and giving rise to increased tension and other symptoms, and tending to simulate, according to its intensity, one of the forms of primary glaucoma; hence its symptomatology needs no special description.

The various subdivisions of primary glaucoma are but estimates of the relative severity or chronicity of its course. Most authors describe a prodromal stage of acute glaucoma, the symptoms of which resemble those of the simple form. The prodromal stage is characterized chiefly by attacks of obscurity of vision. The patient states that, during these attacks, he seems to see through a veil of mist or smoke. He notices that the lights seem to be surrounded by the colors of the spectrum. Accompanying these phenomena the patient experiences more or less sensation of pressure or a dull pain in the affected eye. Upon examination the cornea is found to be slightly opaque, especially in the center; the vision somewhat reduced, the anterior chamber a trifle shallow, the pupil somewhat dilated and reacting less promptly. The tension of the eye is noticeably increased. Frequently slight ciliary injection is present. The symptoms disappear after a few hours, and the eye returns to its former condition. The intervals between the attacks vary greatly, but become shorter. The origin of the attacks is often directly traceable to overexertion, late hours, overuse of the eyes, excesses in eating or drinking, and the symptoms often disappear after a rest. Notwithstanding the apparent return of the eye to normal, the patient finds a rapid increase in his presbyopia, and is compelled to make much more frequent changes of glasses than before the attacks. Without becoming sufficiently violent to constitute acute glaucoma, the attacks may recur with increasing frequency, so that the eye has no time to return to its normal condition, and a state of chronic inflammatory glaucoma follows. The usual sequel to these prodromal attacks is that of acute glaucoma. The attack comes on suddenly after the prodromes have lasted for many weeks, months or years. The acute attack may be precipitated by the causes which led to the prodromal attacks, by anything producing venous congestion or by dilatation of the pupil.

The onset is accompanied by severe pain in the eye, radiating thence to the head and face or to any part supplied by the first and second branches of the trifacial nerve. The attack is often mistaken for some gastric disorder by reason of the nausea, vomiting and fever accompanying it, and the eye condition may be overlooked. The ocular conjunctiva becomes injected, even chemotic. The edema may extend to the lids. The cornea is hazy, and presents a steamy appearance, the anterior chamber is shallow, the

*Read by Dr. B. F. Church at the Thirty-fourth Annual Meeting of the State Society at Paso Robles, April 19-21, 1904.

pupil dilated, irregular and immobile, the iris is discolored by congestion, the tension of the eye is greatly increased. The congestion of the eye, owing to its venous character, is dusky. The cornea becomes anesthetic. Owing to the opacity of the media the fundus cannot be seen.

The prodromal attacks differ only in degree but not in character. Even after a severe attack the eye may return to normal, but after a longer or shorter interval other attacks follow, the vision remains obscured, the tension continues above normal and the eye takes on the glaucomatous appearance. Unless the attack be of short duration, permanent changes take place. The eye, while it loses much of its redness, shows some dilatation of the anterior ciliary veins, the chamber remains somewhat shallow, the iris loses its normal texture and appears atrophic, the pupil is slightly dilated and irregular, and reacts less promptly. The pigment border of the iris seems broader and more prominent by reason of the atrophy of the iris, the tension remains slightly fuller than normal. An examination of the fundus immediately after the attack, unless the prodromal symptoms have been prolonged, shows only hyperemia about the entrance of the optic nerve. Subsequent attacks are apt to be less severe as far as the pain is concerned, but with each one the vision is still further reduced until absolute glaucoma is present. The latter is characterized by the bluish-white sclera over which course the dilated anterior ciliary veins. The cornea is anesthetic but transparent; the iris is reduced to a small stripe, which almost disappears at some points. The chamber is shallow, the bulbous stony hard, a greenish reflex comes from the background, the disk is deeply excavated. Glaucomatous degeneration follows. The cornea becomes opaque, its surface roughened, even vesicles may appear upon the surface, ulceration, with perforation and severe hemorrhage, may ensue. The sclera becomes thinned and staphylomatous, the lens is opaque eventually, atrophy of the globe or panophthalmitis and phthisis follow. The patient obtains no respite from his troubles until the globe has shrunk.

When the symptoms assume an exceedingly acute character, blindness resulting in a few hours, the disease is termed glaucoma fulminans. Frequently the disease is not accompanied by the typical acute attacks, but passes from the prodromal stage into the chronic inflammatory form. The attacks, while much less severe, follow each other rapidly, so that the eye makes no return to the normal, but goes steadily downward.

Glaucoma simplex, or non-inflammatory glaucoma, is marked by the absence of all inflammatory symptoms. The rise of tension is gradual, or may be present at short periods, so that it entirely escapes the examiner. In such cases the diagnosis is often made with difficulty. The anterior ciliary veins are usually slightly more prominent. If the tension be increased, it may be accompanied by slight haziness of the cornea. The vision fails gradually, beginning on the nasal side, though exceptionally the defect may be a concentric shrinkage of the field or a paracentral scotoma. The subjective symptoms consist almost entirely in the disturbance of vision and fleeting attacks of obscurity of sight. The central vision may remain good for a long time and the defect may be overlooked unless the patient be tested with a lessened illumination.

The diagnosis is to be made chiefly on the ophthalmoscopic findings, although these are often far from typical. The disk is white or grayish, more or less excavated, its sides even undermined, so that the vessels bending over the disk margin disappear under the overhanging edge. The arteries are somewhat diminished in caliber, the veins are full and dark. Pulsation of the arteries is present or readily produced by slight pressure on the globe, and the ves-

sels are pushed over toward the inner side of the disk. Around the disk is a pale zone, the glaucomatous halo. The choroid shows signs of atrophy, the larger vessels appearing with distinctness, and giving the fundus a tessellated appearance. Hemorrhages may be present in any type of the disease, from the violence of the inflammation, the increased tension or, in the late stages, from degeneration of the vessels.

Both eyes are generally affected by glaucoma, either simultaneously or at different times, though the type of the disease may differ in the two eyes or the character of the attacks be quite different.

[For discussion see May JOURNAL, page 158.]

PUBLICATIONS.

International Clinics. Philadelphia: J. B. Lippincott Company. Vol. 2 of the Fourteenth Series of "International Clinics" has been received. This volume is in every respect up to the usual degree of excellence that this series has maintained for thirteen years, and certainly the editors' aim at the time of the inception of the work, in 1891, to "make this periodical a complete post-graduate course of medical instruction" has been realized. It would be impossible within the space allotted to a review to dilate on the individual excellencies of many of these articles. The careful physician is going more and more to monographs on special subjects for his reading matter. Superficial literature in book form appealing to the "busy practitioner" has not filled the needs for which it was intended. In this series of monographs and clinical lectures, however, the physician finds a concise yet comprehensive treatise on the subjects considered, and it is filling a want not supplied elsewhere.

Anatomy and Surgery of the Knee-Joint is the principal article in the July number of *Annals of Surgery*, and is illustrated in the lavish manner customary with the *Annals*. Another paper of great interest, and also well illustrated, is on "Primary Sarcom of the Spleen," an exceedingly rare condition.

The American Journal of Obstetrics for July publishes the paper by Dr. Krcutzmann on "Transverse Suprapubic Division of the Skin Applied for the Simultaneous Performance of Intra-Abdominal Work and of Inguinal Shortening of the Round Ligaments," read before the Academy of Medicine some time since, and abstracted in the JOURNAL at the time.

The Virginia Hospital Bulletin is a new journal which started publication in July. It is to be a "quarterly journal of medicine and surgery," issued by the staff of the Virginia Hospital, Richmond, Va. It has an exceedingly awkward shape, and the length of the lines is six inches; too long by at least two inches. The strain upon the eye muscles in following a line of this length is easily perceptible to almost anyone, and is disastrous to one whose muscles are a bit weak.

Longer Medical Course.—It is estimated that there are more than 6,000 physicians in London alone, and the total for Great Britain and Ireland comes to 37,730. The doctors increase at the rate of about 400 per annum. Great as this increase is, it was more than double that number some years ago, before the course of study was lengthened from four years to five.—*Medical Times*.

Pan-American Congress.—The next meeting of the Pan-American Medical Congress will be held in Panama in December. The congress meets every three years. The first session was held in Washington in 1893, the second in Mexico in 1896, but the 1899 meeting was given up on account of war in Venezuela, where it was to have met, and the next one was in 1901, held in Cuba.

COMMUNICATIONS.

THE A. M. A. FINANCIAL STATEMENT AGAIN.

To the Editor of the STATE JOURNAL: I was very much surprised by the editorial in the August number of the JOURNAL commenting upon the report of the Trustees of the A. M. A. At first I thought you certainly had made a grave error, for it seemed quite impossible that the *Journal of the A. M. A.*, carrying as it does such a large amount of advertising, and having such a tremendous circulation, could possibly be running behind. I have made a very careful study of the report, and while I may say that I think I can see the mistake in your reasoning, the whole report is a most curious document, and becomes more perplexing as one devotes more time to its study. Your error lies in the fact that you seem to take it for granted that all the members would pay their \$5.00 dues if they did not get the *Journal*. The Trustees, on the other hand, seem to regard the amount for dues merely as so much money paid for the *Journal*, and in fact give the impression that the great American Medical Association is merely a sort of small adjunct to the *Journal*—existing only for the purpose of getting subscribers to that most excellent publication. But even granting that such is the case, how does it happen that the amount received from dues is \$63,237.48? The dues are \$5.00, which would indicate a membership (paid) of 12,647.496; who is the unfortunate person who is only .496 of a member? On page 1638 is the following table:

Association net profit.....	\$40,488.68
Association expense	\$6,629.80
Organization expense	5,323.19
	11,952.99
	\$52,441.67
Less interest on bonds....	\$560.00
Net income on houses.....	1,400.34
	1,960.34
Journal profit, 1903.....	\$50,481.33

They start with some \$40,000 Association profit, yet close their statement with over \$50,000 Journal profit, four-fifths of which is already given, not as a Journal profit, but as an earning of the Association. But in any event, and aside from whether you are right in your contention or not, it appears that we members of the Association are paying about \$3.50 a year more dues than we should; for certainly that much of our \$5.00 seems to be going into a "sinking fund," for what purpose no one whom I have asked seems to know. Can you tell me what good this money is doing or is going to do? Or can you give me any reason why we should not demand that our dues be reduced, or retire from affiliation with the Association? If you insist, you may publish my name, but I would rather you did not. Very respectfully,

X. Y. Z.

PLEASE HELP!

To the Editor of the STATE JOURNAL: Can you tell me why the following names are not to be found in the Register and Directory published by the society? I noticed them in a recent number of the *Southern California Practitioner*, and looked for them in the Register. I could not find them, and so turned back to the last edition of the old Register, published in 1902, but could not find them in that, either: Dr. J. I. Clark, Santa Ana; Dr. C. H. Rowell, from San Francisco to Fullerton; Dr. J. F. Spencer, from Los Angeles to Gardena; Dr. John Y. Oldham, from Kentucky to Los Angeles; Dr. E. E. Selleck, from New Mexico to Los Angeles. I am not particularly interested in these men, but if they are licensed to practice in California,

why are not their names in the official Register? Respectfully,

A MEMBER.

[I have looked up the names as given by "A Member," but cannot find them. Why they are not to be found in either of the last two editions of the Register, I cannot say. It may be for any one of a number of reasons. Possibly they have no license to practice; perhaps they took out a license years ago, and have just come to the state. The real reason is, however, that co-operation on the part of physicians themselves is not what it should be. If every doctor in the state would take the time and the trouble to let us know as soon as a new doctor appeared in his section, it would be but a very short time till we had all this confusion entirely cleared up, and could say at once just "who's who." There is absolutely no way of getting this matter definitely straightened out unless each and every member of the society will help us with the work.—Ed.]

INTERNATIONAL CONGRESS.

To the Editor of the STATE JOURNAL: The flight of time admonishes us that we are surely and swiftly nearing the date of the Fifteenth International Congress of Medicine, to be held in the latter part of April, 1906, at Lisbon, Portugal. In view of that fact the enclosed circular, which was sent by the learned, efficient and amiable Secretary-General of the Congress, Professor Miguel Bombarda, to many members of the profession in various parts of the world, is particularly opportune. The information contained therein seems to be of sufficient moment to entitle it to space (as there requested) in the next number of your valued JOURNAL, in the interest of the profession on this coast, many of whom, it is hoped, may find time and leisure to attend the congress and to visit the land of Pombal, Camoëns and Albuquerque. Hoping that you may see your way clear to comply with the request made, I remain, my dear colleague, yours fraternally,

ALFRED E. REGENSBURGER.

INERT DRUGS.

To the Editor of the STATE JOURNAL: I do not see why C. S. H. (communication Vol. II, No. 6) should have singled out digitalis in fluid extract as unreliable, allowing the readers of his letter to infer that other galenicals were less uncertain in strength and action. Do any up-to-date physicians use extract or tincture of cinchona when they wish to exhibit the antiperiodic effect associated with the action of its active principle, or do they use tincture of opium when the effect of morphia upon peristaltic action is desired? Probably not; but many do prescribe fluid extracts or tinctures of veratrum, digitalis and pilocarpin. The virtue of any tincture, fluid extract or other preparation, depends upon the amount of the active principle of the substance from which it is prepared, and as no two lots of leaves, bark, roots, buds or twigs contain the same proportion, nor any two manufacturers produce fluid extracts or tinctures which are absolutely alike in active principle strength, it should occasion little surprise if we were all therapeutic nihilists. That there are reliable preparations of the active principles of such plants as are used in medicine seems known to most physicians, but the inertia of conservatism renders the extension of the list very slow. Aconitin, aloin, anemonin, apocynin, arbutin, atropin, berberin, brucin, cactin, caffein, cicutin, cocain, codein, colchicin, digitalin, emetin, ergotin, gelsemin, heroin, hydrastin, hyoscyamin, hyoscin, iridin, morphin, picrotapin, pilocarpin, podophyllin, quassin, quinin, santonin, strychnin, veratrin, represent many of the active principles of the drugs we use, and have the advantages of reliability, permanence and certainty of action; with greater accuracy of dosage; when liquid

medication is preferred, a specific quantity may be dissolved in any appropriate vehicle. But in using these preparations with best effect accurate diagnosis becomes necessary. When conditions require the action of digitalis, the exhibition of the glucosid, digitalin, in proper dosage will produce the results desired, and proper dosage of any of the active principles means "to effect"; in practical application this amount is best determined by small doses frequently repeated until the desired result is attained or the physiological effect of the drug is manifested. The same lack of reliability complained of in the fluid extract of digitalis has been noted recently in tinct nuxvomica and tinct of opium by articles in medical journals, and I have had personal experience with tinct aconite and wine of ipecac, being absolutely inert.

W. S. FOWLER.

INTERNATIONAL CONGRESS OF MEDICINE.

"We have received the first number of the Journal of the XVth International Congress of Medicine, that will take place in Lisbon on the 19th-26th of April, 1906. This number contains the statute of the Congress, the organization of the sections and of the national committees of the different nations. One must remark in the statute the second article, that only admits in the Congress, beyond the doctors, the scientific men presented by the national or Portuguese committees. The contribution is of 25 francs or 20 marks or £1. The work of the Congress is distributed in seventeen sections: 1. Anatomy (descriptive and compared anatomy, anthropology, embryology, histology). 2. Physiology. 3. General pathology, bacteriology and pathological anatomy. 4. Therapeutic and pharmacology. 5. Medicine. 6. Pediatrics. 7. Neurology, psychiatry and criminal anthropology. 8. Dermatology and syphilography. 9. Surgery. 10. Medicine and surgery of the urinary organs. 11. Ophthalmology. 12. Laryngology, rhinology and stomatology. 13. Obstetrics and gynecology. 14. Hygiene and epidemiology. 15. Military medicine. 16. Legal medicine. 17. Colonial and naval medicine.

"The executive committee of the congress has the intention to print, before the reunion, all the official reports; it is necessary that they shall be given before the 30th of September, 1905, to the general secretary. For the free communications it is necessary that they should be given before the 31st of December, 1905, if the authors want that the conclusions should be printed before the opening of the congress.

"The official language is the French. In the general assemblies, as in the sections, English, German and French may be used. We see that the committee of the Congress has excluded the Portuguese from the languages permitted; this has only been done with the intention of diminishing the number of languages spoken; there can be no jealousy, when the legislator begins by sacrificing himself.

"The president of the committee on organization is the Doctor M. da Costa Alemão; the general secretary is the Doctor Miguel Bombarda; all the adhesions [sic] must be addressed to this doctor (Hospital de Rilhafolles, Lisbon)."

Religious Papers and Alcohol. A pretty consistent picture do these two portions of the average religious paper present—advocating, with one hand, alcoholic prohibition, or temperance, and receiving, with the other hand, money for advertising—and thereby recommending to their readers—preparations filled ten times over with more alcohol than the beer which fills them with so much horror in the editorial columns! There are no papers published that are so flagrantly guilty of admitting to their columns the advertisements not only of alcohol-filled medicines, but preparations and cure-alls of the most flagrantly obscene nature, as the so-called religious papers of this country. *Ladies' Home Journal*.

PERSONALS.

Dr. Albert Fouch, formerly of North San Juan, has located in Sutter.

Dr. A. A. O'Neill has moved his office to 502 Sutter street, San Francisco.

Dr. Benjamin A. Mardis has left Placer county, and is located in San Francisco.

Dr. George F. Reinhardt, of Berkeley, has returned from his summer trip to Europe.

Dr. John Stile has left San Francisco, and is now located in Alturas, Modoc county.

Dr. J. A. Andrews, of Santa Barbara, has gone to Europe for a few months' vacation.

Dr. William H. Flint, of Santa Barbara, is spending his vacation with his family, in Connecticut.

Dr. Walter I. Sunburnt, formerly of 224 Eleventh street, San Francisco, has moved to Nevada county.

Dr. George F. Wells, formerly of Booneville, Mendocino county, has located at Geyserville, Sonoma county.

Drs. S. E. Simmons and F. X. Voisard, of Sacramento, were in San Francisco for a short time early in August.

The engagement of Dr. William Lemoyne Wills to Miss Susie Patton, both of Los Angeles, has been announced.

Dr. A. F. Maine of Redwood City has gone East to take a post-graduate course, and will visit the fair at St. Louis on his return.

Dr. Francis M. Pottenger, of Monrovia, was in San Francisco early in August, attending the meeting of the Board of Examiners.

Dr. S. B. Gordan, of Salinas, has returned from his visit in the East, and stopped in San Francisco for a few days on his way home.

Dr. James M. French, who passed the state examination in December, 1903, has located at San Diego, and joined the County Society.

Dr. Ernest Bryant and Mrs. Bryant (who was Miss Susie Bixby until July) were in San Francisco for the closing days of their honeymoon.

Dr. Margaret Mahoney has returned from her studies in Europe, and is located at 1135 Polk street, San Francisco. Office hours, 3 to 5 P. M.

Dr. Fred B. Sutherland has not moved his office from the Starr King Building, as reported (through an unfortunate error) in the last number of the JOURNAL.

Dr. John C. King, of Banning, was in San Francisco for a few days during the early part of August, attending the meeting of the State Board of Medical Examiners, of which board he is a member.

Dr. Emmet Rixford, of San Francisco, was elected president of the American Surgical Association at its recent meeting in St. Louis. The next meeting of this association will be held in San Francisco.

Dr. Ray Lyman Wilbur, formerly assistant professor of physiology at Stanford University, has resigned his position, and will devote his time to the practice of medicine at Stanford. Dr. Wilbur has recently returned from a year's study in Europe.

Dr. Mary B. Ritter, of Berkeley, was seriously injured in an accident near New Almaden, August 15th, and was removed to San Jose for attention. Professor and Dr. Ritter were returning from the quicksilver mines at New Almaden when their horse became frightened and ran away. Dr. Ritter was thrown against the rocks, and her collar-bone and two ribs were fractured.

In prescribing unofficial preparations physicians are very liable to be prescribing only a name with no guarantee that the name stands for anything definite either in number, quantity or quality of ingredients. Facts of this kind have long been known, or at least surmised, by physicians, and their confidence in modern pharmacy has been almost shattered.—*Journal A. M. A.*

STATE EXAMINATIONS, JULY AND AUGUST, 1904.

The following tables give the result of the two recent examinations, the one held at Los Angeles, July 12th, 13th and 14th, and the other at San Francisco, August 2d, 3d and 4th. Those marked (*) are here noted as coming before the board a second time, and (**) a third time, or second reexamination. Due precautions were taken to prevent any "cribbing" or cheating during the examinations. Of course, some of those who were rejected are bitterly complaining, but those competent to pass an opinion say that the examinations were at least fair, and in some cases absurdly easy. One examiner, at least, asked a couple of questions which he himself could not answer; but that is to be expected. The location of the "cerebro-spinal center" would be a difficult matter, while to properly "describe the human nose," in all its features, attributes and variations, would take some time!

There is one thing which the board should by all means do—it should abolish the possibility of any examiner identifying any candidate's papers. This can easily be done by having the candidate deposit his papers in a box, like a ballot box, instead of handing them to the examiner as he leaves the room.

For the ensuing year the board is organized as follows: L. A. Perce (E.), Long Beach, President; W. S. Thorne, San Francisco, Vice-President; Charles L. Tisdale (H.), Alameda, Secretary; Dudley Tait, San Francisco, Treasurer; E. C. Buell (H.), Los Angeles; A. L. Cothran, San Jose; J. C. King, Banning; J. B. Mitchell (E.), San Francisco, and George F. Reinhardt, Berkeley. The office of the board is room 14, 530 California street, San Francisco.

July Examination, Los Angeles.

Passed.

University of Southern California.....	(1903) 86 $\frac{2}{3}$ %, 82 $\frac{2}{3}$ %; (1904) 79 $\frac{5}{8}$ %, 88 $\frac{2}{3}$ %, 77, 82 $\frac{5}{8}$ %, 81 $\frac{3}{4}$ %, 79 $\frac{7}{8}$ %, 81 $\frac{1}{2}$ %, 86 $\frac{1}{2}$ %, 78 $\frac{2}{3}$ %, 85 $\frac{3}{4}$ %, 79 $\frac{7}{8}$ %, 79.
Northwestern University, Ill.....	(1904) 86, 86 $\frac{2}{3}$
Rush Medical College, Ill.....	(1878) 75; (1903) 86 $\frac{1}{3}$
University of Buffalo, N. Y.....	(1899) 84 $\frac{2}{3}$
University of Kharkow, Russia.....	(1894) 75
Columbia University, N. Y.....	(1901) 89 $\frac{2}{3}$
Medical Department Univ. Louisville, Ky.....	(1892) 78 $\frac{2}{3}$
University Vermont.....	(1890) 86 $\frac{1}{3}$
Ohio Medical College.....	(1883) 75
Univ. of the City of New York.....	(1880) 84 $\frac{2}{3}$; (1886) 80 $\frac{2}{3}$
Johns Hopkins, Md.....	(1901) 85 $\frac{1}{2}$
Illinois Medical College.....	(1903) 75
University of Indianapolis, Ind.....	(1904) 81 $\frac{6}{9}$
Starling Medical College.....	(1887) 75
Trinity University, Canada.....	(1904) 80 $\frac{2}{3}$
California Medical College.....	(1904) 82 $\frac{5}{9}$
University Pennsylvania.....	(1884) 77 $\frac{2}{3}$
Chicago Medical College, Ill.....	(1869) 81 $\frac{3}{4}$
College of Physicians and Surgeons, Ill.....	(1904) 79 $\frac{4}{9}$
Missouri Medical College.....	(1881) 78
Laura Memorial Woman's College, Ohio.....	(1902) 76 $\frac{1}{2}$
University of Dublin, Ireland.....	(1878) 75
Western Pennsylvania Medical College.....	(1889) 75

Conditioned.

University of Louisville, Ky.....	(1902) 79 $\frac{1}{2}$
Marion Sims College of Medicine, Mo.....	(1891) 77 $\frac{2}{3}$
College of Physicians and Surgeons, Cal.....	(1903) 78 $\frac{2}{3}$
University of Southern California.....	(1904) 76 $\frac{8}{9}$, 84, 75 $\frac{1}{2}$ %, 75, 80 $\frac{3}{4}$ %, 81 $\frac{1}{2}$ %, 84 $\frac{2}{3}$ %, 82 $\frac{1}{2}$ %.
University of Minnesota.....	(1897) 77 $\frac{5}{8}$
Vanderbilt University, Tenn.....	(1898) 75 $\frac{4}{9}$

Failed.

University Medical College, Mo.....	(1904) 72
University of Southern Tennessee.....	(1895) 66 $\frac{2}{3}$
Eclectic Medical Institute, Ohio.....	(1904) 72 $\frac{2}{3}$
Rush Medical College, Ill.....	(1902) 66 $\frac{2}{3}$
Jefferson Medical College, Pa.....	(1892) 59 $\frac{2}{3}$

University of Southern California.....	(1904) 74 $\frac{5}{9}$, 70 $\frac{1}{2}$ %; (1903) 74 $\frac{2}{3}$ %.
Missouri Medical College.....	(1898) 69 $\frac{2}{3}$
Iowa State University.....	(1897) 64 $\frac{4}{9}$
University of Michigan.....	(1882) 74
Cleveland College of Physicians and Surgeons, Ohio.....	(1895) 69 $\frac{8}{9}$
Kentucky School of Medicine.....	(1885) 65 $\frac{2}{3}$

Passed, 39; conditioned, 13; failed, 13.

August Examination, San Francisco.

Passed.

Cooper Medical College, Cal.....	(1904) 86 $\frac{2}{9}$, 85 $\frac{5}{9}$ %, 79, 82 $\frac{3}{9}$ %, 79 $\frac{3}{9}$ %, 90, 85 $\frac{1}{9}$ %, 79 $\frac{8}{9}$ %, 82 $\frac{5}{9}$ %, 82 $\frac{5}{9}$ %, 80 $\frac{1}{9}$ %, 84 $\frac{8}{9}$ %, 85 $\frac{3}{9}$ %, 81 $\frac{2}{9}$ %, 86 $\frac{1}{9}$ %, 80 $\frac{6}{9}$ %, 80 $\frac{2}{9}$ %, 84 $\frac{5}{9}$ %, 79 $\frac{8}{9}$ %, 81 $\frac{8}{9}$ %, 86 $\frac{2}{9}$ %, 79, 87 $\frac{1}{9}$ %, 78, 78 $\frac{8}{9}$ %, 78 $\frac{8}{9}$ %, (Saginaw Medical College, 1901), 86 $\frac{1}{9}$ %.
College of Physicians and Surgeons, Cal.....	(1902) *79, **75 $\frac{5}{9}$ %; (1904) 77 $\frac{1}{9}$ %, 82 $\frac{2}{9}$ %, 80 $\frac{3}{9}$ %, 75 $\frac{6}{9}$ %, 75 $\frac{5}{9}$ %, 85.
University of California, Medical Department.....	(1898) 82 $\frac{4}{9}$; (1903) 80 $\frac{3}{9}$ %; (1904) 81 $\frac{1}{9}$ %, 80 $\frac{1}{9}$ %, 87 $\frac{2}{9}$ %, 85, 82 $\frac{1}{9}$ %, 88 $\frac{2}{9}$ %, 81 $\frac{1}{9}$ %, 81 $\frac{3}{9}$ %, 83, 80 $\frac{3}{9}$ %, 81 $\frac{5}{9}$ %, 82 $\frac{3}{9}$ %, 81 $\frac{2}{9}$ %.
Rush Medical College, Ill.....	(1881) 75 $\frac{1}{9}$; (1897) 77 $\frac{1}{9}$ %; (1899) 77 $\frac{2}{9}$ %.
University of Basel, Switzerland.....	(1896) 80 $\frac{2}{9}$
Jefferson Medical College, Pa.....	(1903) 83
University of Leipsic, Germany.....	(1900) 80 $\frac{8}{9}$
Northwestern University, Ill.....	(1897) 83 $\frac{4}{9}$
University of Denmark.....	(1894) 80 $\frac{4}{9}$; (1902) 78 $\frac{5}{9}$
Albany Medical College, N. Y.....	(1895) 82 $\frac{2}{9}$
California Medical College.....	(1904) 80 $\frac{2}{9}$
Wooster University, Ohio.....	(1880) 77 $\frac{5}{9}$
University of Minnesota.....	(1901) 82 $\frac{2}{9}$
Long Island College Hospital, N. Y.....	(1899) 79 $\frac{4}{9}$
College of Physicians and Surgeons, Ill.....	(1896) 76 $\frac{2}{9}$
Trinity University, Canada.....	(1901) 80 $\frac{1}{9}$

Conditioned.

Cooper Medical College, Cal.....	(1902) 77 $\frac{5}{9}$; (1903) 78 $\frac{5}{9}$ %; (1904) 83 $\frac{1}{9}$ %, 81.
College of Physicians and Surgeons, Cal.....	(1904) 75 $\frac{8}{9}$
California Medical College.....	(1904) 76
Chicago Homeopathic Medical College, Ill.....	(1904) 75 $\frac{2}{9}$
University of Texas.....	(1896) 76 $\frac{2}{9}$
Harvard University Medical School, Mass.....	(1903) 80 $\frac{2}{9}$
Creighton Medical College, Neb.....	(1904) 80 $\frac{2}{9}$

Failed.

California Medical College.....	(1904) 70 $\frac{3}{9}$
Cooper Medical College, Cal.....	(1904) 63, 74 $\frac{1}{9}$ %, 72
College of Physicians and Surgeons, Cal.....	(1902) 66 $\frac{1}{9}$ %, *66; (1904) 67 $\frac{6}{9}$ %, 74 $\frac{1}{9}$ %, 74 $\frac{2}{9}$ %, 73, 69 $\frac{3}{9}$ %, 59 $\frac{7}{9}$ %, 73.
University of California, Medical Department.....	(1904) 72.
Central College of Physicians and Surgeons Ind.....	(1886) 61 $\frac{8}{9}$
Rush Medical College, Ill.....	(1880) 70 $\frac{8}{9}$
Laval University, Canada.....	(1900) 67
Northwestern University, Ill.....	(1904) 72 $\frac{2}{9}$
Dartmouth Medical College, N. H.....	(1900) 70 $\frac{2}{9}$
Tulane University, La.....	(1895) 73 $\frac{5}{9}$
National University, D. C.....	(1887) 42 $\frac{7}{9}$
Starling Medical College, Ohio.....	(1903) 65 $\frac{2}{9}$
Escola Med. Cir. de Lisbon, Portugal.....	(1896) 68 $\frac{1}{9}$
Maine Medical College, Ohio.....	(1904) 72 $\frac{1}{9}$
University of Minnesota.....	(1901) 67 $\frac{1}{9}$
Hahnemann Medical College, Cal.....	(1903) 67 $\frac{8}{9}$

Passed, 67; conditioned, 10; failed, 26.

Of the graduates of California schools, 94 seem to have come before the board in these two examinations. The results are as follows:

Cooper College—Passed, 27; conditioned, 4; failed, 3.

College of Physicians and Surgeons—Passed, 8; conditioned, 2; failed, 9.

University of California—Passed, 15; conditioned, 0; failed, 1.

University of Southern California—Passed, 14; conditioned, 8; failed, 3.

MEDICAL SOCIETY MEETINGS.

Alameda County.

The regular meeting for August was held on Tuesday, the 9th, the president, Dr. Maher, in the chair. Dr. Hubert Rowell, of Berkeley, read a paper on the subject of "Meningitis," in which he discussed the various forms of inflammation of the membranes of the brain, their causation, symptomatology and treatment; he gave the history of several cases that had come under his personal observation. The paper was comprehensive and scholarly, and elicited considerable discussion from the members present.

Dr. Dukes read a paper on the subject of "Normal Labor in Private Practice," in which he discussed, in a practical way, the duties of the physician to his patient, and of the patient to her physician, during the period of utero-gestation, and outlined the technic of managing a normal labor. He laid special stress upon the care of the patient during the months of her pregnancy, and exhibited a pamphlet which contained in concise form instructions for the pregnant woman. This he had had printed, and it is his custom to present a copy to his patients early in their pregnancy. He stated that it was usually appreciated by them, and was of considerable service to them.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

Orange County.

The Orange County Medical Association met in regular session on the evening of Tuesday, August 2d. Eight members and one visitor attended the meeting; several of the members and regular attendants being away on their summer vacation. Dr. Dobson read the paper of the evening on the subject of "Middle Ear and Allied Diseases," which was discussed by those present. The meeting for September will be devoted to the presentation of patients and report of cases, this program having been arranged owing to the fact that several of the members will probably be in San Francisco attending the Conclave.

H. S. GORDON.

San Francisco County.

The San Francisco County Medical Society met on August 9th, the president, Dr. Rosenstirn, in the chair. Dr. Harry M. Sherman presented a patient exhibiting a very interesting condition. When first seen the boy had a sinus running into the thorax on the left side, and it was not known whether there was a piece of drainage tube in the wound or not. The sinus opened at about the left nipple and extended upward, entering the thorax between the first and second ribs. Operation was decided upon, and it was determined to remove as much of the ribs as possible, and thus allow the chest wall to close down upon the remains of a perfectly useless lung. A long piece of drainage tube was found. The second, third and fourth ribs were removed in about half their extent, commencing at the angle of the ribs posteriorly. The periosteum was allowed to remain in order to permit bone reproduction and secure added strength of the torso. The operation had to be abandoned temporarily on account of the condition of the patient. It was subsequently completed. The patient was shown. The chest wall was provided with a hard covering, owing to the new bone thrown out by the periosteum.

Dr. A. B. Grosse exhibited a patient having true lupus, or tuberculosis of the skin, on the face. He stated that the patient had been subjected to all known treatments during a period of more than ten years. The patient had been under treatment for twenty days by the London lupus lamp and radium of

high potential. Dr. Grosse said that he had found that, as already stated by him before the society, the lupus lamp was of little or no value in deep-seated lesions. The tubercles were apparently unaffected by exposure to it, in the present case, while, on the contrary, exposure to the radium produced a marked result.

A symposium on tuberculosis was next opened by Dr. William Fitch Cheney, who discussed the "Early Diagnosis of Tuberculosis." Dr. Cheney dwelt with special emphasis upon the fact that the greatest care and patience must be exercised and repeated examinations made in order to make the diagnosis at a time when it is of most value to the patient. After bacilli appear in the sputum, the case has reached a dangerous stage of advancement; to help the patient most, diagnosis must be made by the compilation of a large number of little points which, taken together, make up the evidence. He emphasized the fact that the text-book picture of tuberculosis is that of advanced rather than early manifestation of the disease, and hence is dangerously misleading. The whole history should be carefully taken, and especial effort should be made to elicit information as to the patient's exposure to contact with tubercular individuals, rather than to the unimportant fact of deaths, in his family, of individuals with whom he did not come in contact. The temperature should be taken every two hours for at least two weeks in order to be of any value. The chest should be examined with all the clothing removed. There is apt to be little or no sputum, and potassium iodid is valuable, as it tends to produce some which may be used for examination. Bacilli in the sputum should not be expected to aid in the early diagnosis. The tuberculin test is of questionable value, as is also the use of the X-ray. In conclusion he pointed out the three things which should be avoided in making a diagnosis: First, a preconceived idea of the examiner; second, lack of care in the minor details of examination; third, lack of persistence in keeping at the examinations until a diagnosis is satisfactorily made.

Dr. George H. Evans spoke of "Prevention." He deplored the actions that had produced phthisiophobia, believing quarantine to be useless and foolish. Anti-spitting ordinances well carried out would do much good. Thorough disinfection and renovation of all premises in which persons had died of the disease, should be enforced. Notification should be required, not for purposes of quarantine, but to educate the patient and his family. Education he considered of the greatest value. Dispensaries for the poor should be provided. He estimated the yearly loss to the state, from tuberculosis, at approximately \$3,240,000. Sanatorium treatment he considered of the first value, and climatology of relatively little importance. Cow's milk is undoubtedly a common source of infection in infants, and should be guarded against.

Dr. Albert Abrams discussed the question of "Treatment," and considered early diagnosis as the most important element. The patient exhibiting suspicious symptoms should be regarded as tuberculous until proven otherwise. The bacilli he considered of minor importance in the production of the disease, the poor physical condition being the main factor. He regarded the results of sanatorium treatment as not so good as those secured by extra-sanatorium treatment. He advocated life in the open air, in a tent, etc., and proper forced feeding as the principal agents in treatment. He said that any climate is right; that location makes no difference; that all that is required is equable temperature, dry, pure air, and plenty of sunshine.

Dr. William W. Kerr opened the discussion. He said that one should not wait for the bacilli to appear in the sputum before making a diagnosis. That too many men depended too much upon the bac-

teriologist for their diagnoses. In regard to notification he asked what could one base his diagnosis on before the bacillary stage. The physician might be sure of his diagnosis, but unable to absolutely prove it. He considered both sanatorium treatment and forced feeding as more or less in the nature of fads, and perhaps somewhat abused.

Dr. Henry Gibbons, Jr., said that the open-air treatment seemed to be regarded as a new thing, whereas it really is not. He said there were a number of persons still living for whom his father had prescribed the open-air treatment twenty-five or thirty years ago.

Dr. Henry Harris mentioned the value of percussion in making out the transverse diameter of the apex.

Dr. Philip K. Brown thought the X-rays of little or no value in making an early diagnosis. He referred to animal tuberculosis, and mentioned two cases that had come within his experience in which a cat and a dog had acquired the disease from human patients. He valued highly the open-air treatment, but could not follow Dr. Abrams into the tent, as he considered it the worst possible sort of habitation.

Dr. J. Henry Barbat said that the disease did not always start in the apex, and that it should be looked for elsewhere. He considered the X-rays as very valuable in making a diagnosis.

Dr. Kaspar Pischel called attention to the recent statement of Wood of Philadelphia, to the effect that he had found bacilli in a large number of tonsils removed from patients who were not tubercular. He called attention to the fact that tuberculosis of the larynx had been cured. He emphasized the importance of proper breathing, etc., and stated that the nose and throat should be carefully examined and any deficiencies attended to.

Drs. Cheney, Evans and Abrams closed the discussion.

On motion, the recommendations of the special committee on prosecution of illegal practitioners were referred to the executive committee, with power to act. On motion of Dr. Kenyon the sum of \$200 was appropriated for the Walter Reed memorial fund.

The following doctors were elected to membership in the society: J. de Chantreau, F. K. Ainsworth, Louis I. Breitstein, D. F. Ragan, Adolph Baer, Henry du R. Phelan, H. T. Rooney, J. H. Soper, C. S. Downes, C. E. Beebe, Caroline Rosenberg, Grant Selfridge, Abel W. Johnson, Theodora Vassault, Cullen E. Welty, Emil U. Torello.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular meeting for the month of July in the parlor of the Arlington Hotel, Santa Barbara. The meeting was called to order by the president, Dr. Charles Anderson, and the following members were present: Drs. W. F. Blake, D. Conrad, W. B. Cunnane, L. F. Mansfield and C. S. Stoddard. Dr. Blake reported a very interesting case of "What is it?" A child, without any subjective symptoms whatever, family history negative, playful and apparently in a perfectly normal condition except for a rise of temperature for ten days, ranging from 101° in the morning to 104° in the evening. Physical examination negative; microscopical examination of secretions, negative. No apparent result from antipyretics or bathing. Dr. C. S. Stoddard read the paper of the evening, entitled "Obstetric Hints." The paper was based upon his personal experience, and was of unusual interest. He said that in his experience puerperal eclampsia is the most formidable complication one has to contend with in the lying-in-room, and that it behooves every obstetric physician to be well prepared. He thought it could be prevented by appropriate treatment in the majority of instances, if one had control of the patient

from the beginning of pregnancy. Dr. H. C. Bagby, of Santa Maria, was elected to membership in the County Society.

PACIFIC SOCIETY OF RAILWAY SURGEONS.

The society was called to order by the president, Dr. W. B. Coffey, at the St. Francis Hotel, San Francisco, August 17th. The society, though not an old one, is in excellent condition, and reports a membership of 150. The meetings were well attended, and in every way successful. The subject of appendicitis, as usual, evoked a good deal of discussion and elicited diverse opinions regarding time of operation, drainage, etc.

CHILD STUDY CONGRESS.

The first International Congress on child study, home education and protection of children will be held at the Universal Exposition of Liege (Belgium) in September, 1905. All persons interested in education of children are invited to become members of that congress. They will receive full particulars in applying to the secretary, M. Pien, rue Rubens, 44, Brussels, Belgium.

At the same time they are invited to send to the Liege exhibition all documents, statistics, books, teaching materials, concerning child study, home education, education of the feeble-minded and protection of children that will be useful to the congress. For the universal exposition please apply to the Commissariat General du Gouvernement Belge, 65 rue Royale, Brussels, Belgium.

LANE MEDICAL LIBRARY.

It has been announced that Cooper College is to erect a building and establish a magnificent medical library in San Francisco, on the corner of Webster and Sacramento streets. This action is in accord with the wishes of Dr. Lane's widow. The library will be known as the Levi Cooper Lane Library of Medicine and Surgery. The requisite land has been purchased, and some \$200,000 are to be expended in putting up the building and adding to the library.

UNIVERSITY OF CALIFORNIA DENTAL DEPARTMENT.

Some time ago the president, Dr. Wheeler, appointed Dr. Harry P. Carlton dean of the Dental Department. Two new chairs in the faculty are announced: Dr. John A. Engs, of Oakland, professor of bacteriology and pathology; Dr. Alfred Schneider, San Francisco, professor of materia medica and therapeutics. A general reorganization has been effected, and some \$5,000 have been expended in new equipment.

Congress on Tuberculosis.—The International Congress on Tuberculosis will be held in St. Louis, October 3, 4 and 5, under the auspices of the World's Fair, as one of the international congresses. Clark Bell, Esq., editor of the *Medico-Legal Journal*, New York, is chairman of the executive committee. The Governors of the several States have been invited to name delegates to this important congress.

Kansas on Secret Remedies.—At the last meeting of the Kansas State Medical Society a resolution was introduced to the effect that all advertisements of secret remedies be excluded from the pages of its journal. The motion was referred to the Council, and in the published report of the meeting, *Journal of the Kansas State Medical Society*, July, there is no mention as to the action or report of the Council on the resolution. It is certainly to be hoped that the Council supported the resolution.

DEATHS.

Dr. Charles Everett Vaughan died at his residence in Santa Barbara on June 24th. Dr. Vaughan graduated at Harvard in 1863, and came to California in 1896, and had lived in Santa Barbara for some time. He was a member of the Santa Barbara County Medical Society.

Dr. Frank H. Payne, University avenue, Berkeley, died August 8th, aged 54 years. Dr. Payne graduated at Rush in 1874, coming almost at once to California. For twenty-seven years Dr. Payne had practiced continuously in the college town, going to Berkeley one year before it was incorporated, and was for several years the only physician in the place. During his residence he served for many years as Health Officer without pay. He was a member of his County Medical Society, a prominent Mason, and a member of the Bohemian Club of San Francisco.

THE NOSTRUM, THE FOE OF RATIONAL MEDICINE.

Dr. Harvey W. Wiley, in an interview in the *Druggists' Circular*, says:

"The foes of rational medicine at the present time are, first, the quack, a man possessing possibly high medical training and skill, but unfortunately devoid of those principles of ethics without which the honorable practice of a profession is impossible; second, the charlatan, a man necessarily devoid of any medical training or ability, who plays upon the feelings of his patients and administers nostrums of no value and applied with no science. The third foe of rational medicine is the impersonal physician, namely, the nostrum, the patent medicine and the proprietary remedy. It is appalling to think of the thousands and thousands of our fellow citizens who pin their faith to these alleged remedies. Some of them have value; they are, in fact, often the very remedies which are described in the *materia medica* and the *pharmacopœia* and administered by physicians, but distributed as they are, with absurd claims of efficiency, taken as they are without the advice or consent of a physician, they become not only one of the greatest foes of rational medicine, but one of the greatest dangers to the public at large."

This third foe of our profession—the nostrum—the "patent medicine"—the proprietary with the unknown formula—is one that so many of us are cherishing, excusing, using, promoting, prescribing and generally helping along in the sad work of undermining the medical profession. What is the actual difference, so far as the ethical and professional facts of the case are concerned, between Lydia Pinkham's Vegetable Compound or Hostetter's Stomach Bitters, and the following "proprietarys," selected at random from the *Medical Association*, *American Medicine*, and the *New York Medical Journal*: Antikamnia, arsenauro, antiphlogistine, pepto-mangan, Kutnow's powder, neurosine, unguentine, chionia, Eskay's food, manola, marigol, lythol, urisepin, and our dear old friend—"California syrup of figs"?

THE POSTOFFICE AND FRAUDULENT MEDICINES.

The *Druggists' Circular* for July devotes considerable space to the subject of nostrums and the attitude of the Postoffice toward them; alcohol in nostrums, etc. An interview with the assistant attorney-general for the Postoffice is significant. We quote a portion of it:

"I should like to disabuse the public mind of the impression that the department has undertaken a campaign or crusade of any kind against anything or anybody. We have taken up individual cases as they have been presented to us, usually by persons who have complained that they had been defrauded

through the purchase of worthless remedies. As the law on the subject of the use of the mails for fraudulent purposes, either through newspaper advertising or circulars, is very clear and specific, we have in each case made a careful examination, and where analysis has shown the so-called medicines to be absolutely worthless we have issued fraud orders. During my own incumbency in office I have not paid special attention to the question of obscene advertising matter to which the department's published statement refers, although I believe my predecessor went into that phase of the subject very thoroughly. As a matter of fact, I think it will be found that where the advertising matter is of an objectionable character, the so-called remedies which are advertised are practically worthless, and therefore fraudulent; hence by issuing fraud orders against manufacturers or sellers of these goods we at the same time abolish their literature from the newspapers and from the mails."

STARVATION FEES IN ENGLAND.

An action at law tried within the last few days in the High Court of Justice throws a lurid light on the fierce struggle for life which is the lot of medical men practicing in the poor districts of London. It was stated in evidence that there are doctors who will give advice and medicine for twopence, if the patient calls on them; if the doctor has to visit the patient the charge is fivepence! Sixpence a visit with medicine thrown in is a comparatively high fee. There are doctors who will attend a patient at his own home and supply him with physic for an inclusive charge of three shillings and sixpence a week. And these are not starving young doctors who, like a man whom I knew, keep themselves alive through the winter by drinking codliver oil in their own dispensaries, but prosperous traders who drive about in carriages. It is likely enough that the advice and the physic in many cases are together not worth more than the twopence at which the vendor values them, but the wonder remains how a man can make a living on such a scale of fees. Can it be wondered at that the medical profession does not stand very high in public opinion when its own members rate their services so low?—*Medical News*.

"SCIENCE" OF OSTEOPATHY.

In April, 1902, the so-called "National School of Osteopathy" offered "Our full mail course in osteopathy, bound in five parts, examination papers and degree of D. O., for \$10, instead of \$25." The circular goes on to say:

"To compensate ourselves, however, for this reduction of price, we must withdraw the offer of the anatomic chart and books on anatomy and physiology which we offer to our \$25 students. However, as these latter works are not essential to your success as an osteopath, you will probably be much better pleased with this \$10 offer. There will be no further reduction in the cost of our course at any time. We do not find that any of our students are unable to pass our examinations, because our instruction is so plain."

And these are the people that some of our state legislatures are licensing, and for whom some of our noted writers appear before legislators to advocate the issuing of such licenses.

According to Dr. Hiss, of Chicago, the annual sale of "patent" medicines in the United States must reach the enormous sum of \$60,000,000, and a large portion of this does positive harm. It is stated that one of our smaller middle western cities alone turns out 21,000,000 barrels of patent medicines per year, and in France they even have slot machines for vending patent medicines.—Dr. O. T. Osborne, Address, A. M. A.

HYDROTHERAPY IN RHEUMATISM.*

By A. J. SANDERSON, M. D., San Francisco.

HYDROTHERAPY in some form has long been in general use in the treatment of rheumatism, but the practice is often empirical. The frequency of this disease, its various complications and important sequelæ, together with the carelessness with which a large class of painful joint and muscular troubles are classed under the general head of rheumatism, and the common practice to treat all cases alike by means of an eliminating and depleting method, has led to the present consideration of a rational treatment of this affection.

It being customary for a large percentage of the patients suffering from rheumatism to visit some institution or mineral spring, I have sent the following list of questions to a number of these places, for the purpose of ascertaining the character of the work that is being done:

1. How many cases of chronic rheumatism are treated at your institution annually?
2. What method of treatment is mostly relied upon in the cure of these cases?
3. What percentage of the patients is sent away cured?
4. What percentage of the patients is sent away improved?
5. What percentage of the patients is incurable.
6. What class of rheumatic cases is found to be unimproved?
7. Are the cases that come in carefully classified?
8. Have you a physician at the springs who makes a careful study of the cases that come under your care?

The following statements are taken from the answers received:

Arroyo Grande Springs, San Luis Obispo County, Cal.—Treats a number of cases annually. No records kept. Claims to cure all cases. Have no physician. Cases not classified. Treatment employed, drinking mineral waters and baths. Water contains iron, magnesia, sodium and potassium salts. Temperature 100.5 degrees Fahrenheit.

Saratoga Springs, Lake County, Cal.—Treats a number of cases annually. No records kept. Cures a large proportion. Treatment consists of drinking mineral water and baths.

The Geysers, Sonoma County, Cal., report about 250 cases treated annually. Have had no resident physician. Cases not classified. Claim to cure 75 per cent. Treatment employed, geyser steam baths. These baths have steam impregnated with sulphur and other minerals, being piped from the geysers to the steam room.

Anderson Springs, Cal.—A few cases treated annually. All of them benefited. No resident physician, and cases not classified. Treatment employed, natural steam baths, hot sulphur baths, cold iron baths and massage.

Paraiso Springs, Cal.—About 250 cases treated annually. Claim 50 per cent cured, 40 per cent benefited and find 10 per cent of cases incurable. Incurable cases are those of years' standing, where joints are much enlarged. Cases not classified. Has resident physician most of the time. Treatment consists of hot soda baths, salt rubs, massage, blanket sweats, drinking large quantities of soda water.

Siegler Hot Springs, Lake County, Cal.—About 100 cases treated annually. Report 80 per cent cured, and 10 per cent found incurable. No resident physician, but one called when desired. Treatment consists of diet, drinking large quantities of hot iron water, hot baths at as high a temperature as can be borne. Springs vary from 90 to 136 degrees Fahrenheit. Also use blanket sweats and laxative water.

Harbin Hot Springs, Cal.—Treat about 150 cases annually. Claim to cure 90 per cent. Find about 2 per cent incurable. Incurable cases classified as having cardiac lesions. Cases not classified. Physician in attendance. Treatment consists of drinking the mineral water, hot baths, mud baths and massage. Potassium iodid and salicylates used in some cases.

Klamath Springs, Keswick, Siskiyou County, Cal.—This place is run as a summer resort. A number of cases of rheumatism treated annually. Nearly all benefited. Have no resident physician, and cases not classified. Treatment employed, hot mud baths, tepid shower baths and rest.

Allen Springs, Lake County, Cal.—Quite a large number treated annually. Gives history of a number of cases that have made remarkable recoveries. Nearly all cases benefited. Has no resident physician. Cases not classified. Treatment consists of drinking mineral water in connection with cold creek bathing.

Bartlett Springs, Cal.—This institution has about 2,000 guests annually, mostly kidney and liver troubles. But a small proportion are rheumatism. Nearly all these are benefited. There is a resident physician, but patients generally decline to consult a physician. The cases are classified. Treatment employed, drinking freely of the water, and hot soda magnesia baths.

Paso Robles Springs, Cal.—Eight hundred to 1,000 treated annually. Sixty to 75 per cent cured. Very small percentage not improved. Has resident physician, and cases are carefully classified. Treatment consists of drinking the different waters, hot sulphur baths, mud baths, sweats and massage.

Byron Hot Springs, Cal.—About 50 cases treated annually, and 4 per cent found incurable. Other cases benefited, but few remain long enough for perfect recovery. Has resident physician, and cases are carefully classified. Treatment employed, general tonic treatment used of arsenic and strychnin, potassium iodid, though acetyl salicylic acid is the principal drug; nourishing food and diuretic mineral waters, mud baths and hot mineral baths, according to the strength of the patient. Dr. Crees has only reported the cases that have been treated as hospital patients. No account has been made of those who came to make use of the water and baths for their rheumatic complaints. In fact, the doctor thinks that but few of these are true rheumatism.

Sanitarium, Battle Creek, Mich.—Treats 100 cases annually. Has regular physician in charge. Cases carefully classified. Treatment employed, electric light baths followed by cold baths, massage, manual Swedish movements, radiant heat to joints, followed by heating compress, anti-uric acid diet, sun baths, general application of the actinic ray. When there is neither flexion of the joint nor serious deformities, cure may be anticipated in all cases. In cases in which there is flexion of the joint and serious deformity, patients can only be improved.

A glance at these reports will show that in the majority of instances all cases are classed together and treated alike. Usually no records are kept, and more often the patient directs his own treatment. The results, consequently, are not satisfactory as to the full benefits that might be obtained at these springs, or as to the real merits of the treatment employed. It only emphasizes the importance of more accurate, scientific work being done in the treatment of this important disease. People need to be taught that chronic or recurrent rheumatism is a serious affection which is likely to lead to permanent disablement, and that it should be taken hold of and treated in an intelligent manner. Before a line of treatment can be mapped out for rheumatism, a careful diagnosis should be made. Rheumatoid arthritis, arthritis deformans, neuritis, neuralgia,

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

various systemic diseases of the cord in their initial stages and simple inflamed conditions of the joints should be recognized, eliminated and treated as indicated.

The real cases of rheumatism need to be individualized. There is an individuality in disease as well as in persons. The individual needs to be understood before he can be properly handled. Hydrotherapy, which will affect one individual favorably, may have a very unfavorable influence on another person suffering from the same conditions. Accuracy should be exercised in giving the treatment that has been carefully prescribed. Prolonged, careless bathing should be avoided. The applications should be precise, decided and given with dispatch. Undue exposure should be avoided, and the room should be well ventilated, warm and dry. In connection with treatment, a proper diet should be instituted. The indications are for one that will be freest from uric-acid forming material, and one that will best agree with the peculiar conditions of the digestive organs and alimentary canal and most effectually nourish the patient. The indications to be met in treatment are the elimination in the most economical way of the toxic rheumatic material from the system, the establishment of a normal metabolism and insuring the normal tone and resistance of the tissues.

The elimination of the rheumatic material and other toxins from the system is to be accomplished by free water drinking and hot applications. The patient should drink not less than from four to eight pints of water daily. After a few treatments he will perspire freely. Hot applications may be in the form of hot blanket packs, fomentations to the affected joints while the patient is covered with a warm blanket, the hot full bath, the mud bath, the hot air bath or the electric light bath. These baths in many cases can be followed by dry blanket sweats. The special form to be selected for each case is a matter of the special requirements of the patient and appliances at hand. The imperative need is that whatever treatment is used it should be hot; that free perspiration be invoked; that the extent of the treatment be adapted to the strength and vitality of the patient; also, that a proper after-treatment be employed. This after-treatment should be a cold application, one that is decisive, and one that will bring about a reaction which will be felt by the patient and adapted to his condition. Severe cold applications cannot be borne in acute cases, and in all cases the measure of the shock should be carefully regulated, and always followed by the desired reaction. Ten degrees fall of temperature with some patients means as much as 60 degrees to others. Mild measures can be used at first in doubtful cases, and at each succeeding treatment lower the temperature one or two degrees until a favorable minimum temperature is reached. The reaction is the most important part of the cure. The eliminative process alone may prove effective, where the patient is robust, the rheumatic diathesis has not become established and the alimentary canal is in a good condition. But where any two of these conditions are lacking, the recovery without some tonic influence to support the system and re-establish internal resistance is doubtful. Hydrotherapy fully meets the requirements of this tonic action. In nearly all cases after the hot treatment some cold application should be immediately given. One of the mildest methods is the use of cold friction. With mitts, made of coarse Turkish cloth, on the hands, dipping them in cold water at a temperature adapted to the case, varying from 75 to 50 degrees Fahrenheit, and with only a small portion of the body exposed, making rapid friction until perspiration is checked and a reaction is brought about, as indicated by a red skin and feeling of warmth by the patient; continue the treatment until the whole body is treated. A little more severe measure is a cold towel rub. A fair-sized Turkish towel is wrung

moderately dry out of cold water, unfolded and placed quickly over the surface of the body. Rapid friction is then made until reaction is established. A still more radical measure may be obtained by the cold douche, to be used only in sub-acute and chronic cases. It is my practice, when a patient is taken from the sweat bath, to first place him under a douche at a temperature of 110 or 115 degrees for one or two minutes, and then instantly turn on the cold douche for fifteen to thirty seconds at a temperature as cold as the patient can react from, varying from 80 to 60 degrees. The patient is dried thoroughly and quickly, and if any of the symptoms of the disease are acute, as may be indicated by the presence of fever, he is placed in a warm bed. In chronic cases where there is no fever, the treatment is followed by massage and exercise.

In some cases massage to the joints cannot be taken with favorable results till some time after all acute symptoms are passed, though massage to muscles as practiced by Professor Max Schuller will be effective. In acute and sub-acute cases where the joints are painful and swollen, compresses should be continuously applied between the hot applications. A soft cotton cloth wrung out of water at 60 degrees is wrapped around the joints and snugly covered with a flannel of three or four thicknesses. The compress is changed whenever it becomes heated by the feverishness of the part. This compress often proves very efficient. Dr. Baruch reports that since introducing this method in the J. Wood Wright Memorial Hospital the duration of the treatment of his patient has been diminished from 20 to 35 per cent.

The form of hot treatment that is to be used should be selected with care. In acute cases the fomentation or pack is best. It can be given in the room, either on the bed or on a cot. The hot air baths have some advantages for the chronic cases. The dryness of the atmosphere and the extent of heat that can be obtained has a favorable influence on metabolism and tissue change. With this bath the internal temperature is raised, materially favoring oxidation and elimination. In observing temperature of patients taking treatment in the Riverside Dispensary in New York, I found that it would raise from one to four degrees during a hot air bath of fifteen to twenty minutes. This rise would rapidly fall with the cold douche which followed, and would again become normal after a half hour's rest. The electric light bath has advantages over the other forms of dry heat. The light rays are more penetrating, being communicated by radiation rather than conduction. The patient perspires at a very much lower temperature, and the bath can be borne by the patient with less depressing results. In chronic cases with large and painful joints, Dr. Schuller uses the Scotch douche, which consists of a rapidly alternating hot and cold stream poured against the affected joint with varying pressure. The mechanical effect, as well as the stimulus of the hot and cold, favors absorption and relieves the pain and soreness.

DISCUSSION.

Dr. E. H. Woolsey, Oakland.—The treatment advised in this paper is very applicable in our southern climates, because we readily perspire and do not eliminate the poisons taken in. Not enough stress was given to the diet. That is one of the main things in the treatment of rheumatism. I know this as a fact, because I have lived experimentally and professionally for sixty years; I have treated rheumatism and have had rheumatism. We all know that rheumatism can be got rid of by going to the mountains or warm climates, by fishing or hunting. I believe that fresh air, taking exercise and baths is the best of all methods for treating rheumatism. Behind that is the question of diet. A man who eats meat is putting rheumatism into himself just as fast as he can. Again, a man who takes meat and is able to

eliminate enough to keep himself free from rheumatism by taking a little acid is less apt to suffer. Cut out the meat. From my personal experience the man who lives on a vegetable diet will not have rheumatism.

Dr. Robert Cress, Bartlett Springs.—It seems to me that the term rheumatism is not always used correctly. Rheumatism to-day means a condition to which we can apply no other name. It may be sciatica, neuralgia or neuritis; and still further, gout is confused with rheumatism. Dr. Woolsey has given us in his discussion a pretty good description of gouty conditions, but he calls it rheumatism. What is a true rheumatic condition? As to the diet, that is a point which should have careful consideration. The laity consider that all forms should be treated by restricted albuminous diet. Take a case of acute articular rheumatism; there is no disease which will destroy tissue so fast as that, not even typhoid. When a patient is convalescing from such a disease as that think how serious it is to restrict that individual's diet. He requires nourishment. I am guided rather by the physical condition than by the name of the disease. If the vitality is low, I feed these patients upon a meat diet.

Dr. G. H. Evans, San Francisco.—Regarding the amount of exercise, we must remember in these cases the possible heart lesions. I recall a patient of mine who came to this hotel less than two years ago. He had what he thought was rheumatism, and had come down here, and, without an examination of his heart by the physician of the hotel, was taking these hot mud baths. I found the man with a dilated heart, and immediately stopped the baths. The number of cardiac lesions, and the care with which these cases should be examined, are important facts.

Dr. A. J. Sanderson, San Francisco.—In writing this paper I avoided any discussion of the cause of rheumatism purposely. Whether it is caused by uric acid or by some toxin in the system are different opinions. The question of diet is very important. The Japanese, it is noticed, very seldom have rheumatism. One reason is because they live on a vegetarian diet. I believe in vegetarian diet. In regard to the hot baths, while they are so very hot they also act as a stimulant. The great trouble is the prolonged warm baths give no decided reaction. They weaken the patient, and may help develop the heart lesions. I emphasize the cold treatment because I think it has advantages. When regulated according to the strength of the patient, it is more effective than ordinary methods.

TOTAL LARYNGECTOMY FOR EPITHELIOMA. EMPLOYMENT OF THE GLUCK PHONATION APPARATUS.

By WALLACE I. TERRY, M. D., San Francisco.

THIS patient, M. K., aged 42, came under my care in the service of Dr. T. W. Huntington, at the City and County Hospital, last May, during the absence of Dr. Huntington in the East. He was referred to me by Dr. Geo. H. Powers, who had had the patient under observation and treatment for a month previous and had made the diagnosis of probable epithelioma of the larynx.

May 7th of this year I did a laryngotomy under local cocain anesthesia and removed all the tumor masses visible, including the vocal cords. A microscopical examination confirmed the diagnosis of epithelioma.

August 31st the patient re-entered the City and County Hospital, complaining of marked dyspnea. A laryngoscopic examination at that time showed a marked stenosis of the upper portion of the larynx. No tumor masses could be seen. There was an abscess cavity to the left of the larynx following infection from the first operation. On that day I again did a laryngot-

omy under local anesthesia and removed a number of small tumors from the upper and middle portions of the larynx and dissected away the cicatricial bands which encroached on the lumen of the larynx. Microscopical examination of the tumors again showed epithelioma. The laryngeal wound was left open. Nine days later the patient was subjected to X-ray treatment through the open wound in the larynx, but it was discontinued after nine treatments, which were without apparent benefit, as the obstruction in the larynx kept increasing and made necessary the insertion of a tracheotomy tube in the larynx.

September 22, 1903. Three weeks after the second operation I removed the entire larynx, following quite closely the technic as elaborated by Keen of Philadelphia. A median incision was made from above the hyoid bone to a point $1\frac{1}{2}$ inches above the sternum. The trachea was dissected free, necessitating division of the isthmus of the thyroid. The trachea was divided across between the third and fourth rings, and the lower portion drawn forwards and downwards and attached to the skin by a number of catgut sutures. A tracheotomy tube was then inserted and the anesthetic continued through it. With the patient in the Trendelenburg position the larynx was dissected free; a rather difficult procedure in this case, owing to many adhesions resultant from the previous operations, and especially the infection. An abscess cavity was found extending along the left cornu of the hyoid bone. The epiglottis was dissected out separately, except a small portion of the tip, which was unintentionally left. The mucous membrane of the pharynx was next sutured together with catgut and a few sutures employed to bring together the muscles of the pharynx. The hemorrhage was not severe and was mostly from the thyroid isthmus. The greater part of the wound was closed with silkworm gut with a cigarette drain in the abscess cavity along the hyoid. The tube in the trachea was removed and an open-ended pill-box covered with moist warm gauze placed over the trachea. Chloroform was the anesthetic used. The anesthetists' record of blood pressure and pulse showed no marked shock during the operation, but for a couple of hours after the operation, with the patient still in the Trendelenburg position, the pulse was almost imperceptible and the respirations were reduced to four per minute. Oxygen and stimulants were administered and had the desired effect.

The suggestion of Crile to apply cocain to the interior of the larynx as a preventive of laryngeal shock seems to me a good one, and in another case I should use it. Two days after the operation the patient was allowed to drink sterile water. Four days later patient was up and around, and could eat soft food. Since then the patient has gained in weight, twenty pounds to date, and the wound in the neck has closed almost entirely.

A short time ago, at the suggestion of Dr. Newman, I made an artificial larynx after Gluck's model, and the patient is rapidly learning to speak. Gluck inserted the tube into the nose instead of the mouth, but it seems to me an objectionable procedure, as one would view such an apparatus with a certain amount of repugnance; furthermore, the patient would have to become accustomed to the presence of a tube in the nose as far back as the posterior wall of the pharynx.

There are two points about this case which have occurred to me since the operation. In the first place I should have urged a total laryngectomy on the patient as soon as the microscopical diagnosis was made after the first laryngotomy. By

so doing the chances of ultimate recovery would have been much heightened, and there would have been a cleaner operative field, permitting a complete closure of the wound. Keen obtained primary healing throughout in his case. Second, the suggestion of Crile, of which mention has already been made.

The latest statistics which I have been able to see in regard to total laryngectomy are those of Delavan of New York, as given in the *New York Medical Journal*, September 15, 1900, p. 449. He tabulates thirty-four cases operated upon by six surgeons: Recurrence, 35 per cent.; relative cure (less than three years), 32 per cent.; definitive cure (three years or more), 6 per cent.; operative deaths, 26 per cent.

DR. MURPHY'S SUGGESTION.

In the discussion of Dr. Claire W. Murphy's paper on "Surgical Anatomy of the Inguinal Canal," page 162 of the May JOURNAL, occurs the following sentence: "It is well to enter the inguinal space from above, as suggested by Dr. Wills." This is an error, for the suggestion was presented by Dr. Murphy, and Dr. Wills referred to it in his discussion.

THE PRESIDIO GENERAL HOSPITAL.

Colonel Girard, in the *Journal of the Association of Military Surgeons*, has an excellent and exhaustive report of the Army General Hospital at the Presidio. The Nosological Index of Diseases treated at the hospital from July, 1899, to July, 1902, should be of much interest to one gathering statistics.

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IMPORTANT NOTICE!

Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

OCTOBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

There are various ways in which communities gain fame or notoriety. One pretty good way is through the local board of **INTELLIGENT HEALTH BOARD.** health. San Francisco seems to have gained somewhat more than its share of notoriety in

this manner, and there appears to be a good, big lot of it still coming. The Board of Health has just issued a brief pamphlet entitled "Health Hints for the Household; a Brief Treatise on Infectious, Contagious or Communicable Diseases." This is a curious collection of conglomerate cogitations collected and compiled—not by a hmatic, but "under the auspices of the Board of Health"! List to the first sentence: "This pamphlet is issued by the Board of Health of San Francisco for the purpose of furnishing medical information, briefly, in regard to the care in the families of contagious, communicable and infectious diseases." If you are a "contagious, communicable or infectious" disease, you certainly will have some "care in your family," either with or without the assistance of the "Board of Health." The whole thing is so deliciously assinine that we should delight to publish it all—but space is too precious. A few more choice samples must be quoted, however: "The word infection literally means mak-

ing 'into,' and in medical science it means the entrance into a living body of something capable of producing disease. This poison is generally of animal or vegetable origin, and is invisible to the naked eye." My! What a lot there is yet to learn! What an infernal shame that we are not posted as to the other origins of infection, other than animal or vegetable! The writer should have been more generous and not have kept so much science to himself. "What it is when it is a scientific?" Here is another chunk of wisdom: "Contagion is a kind of infection in which the poison is communicated." Dr. Welch ought not to have delivered the Lane Lectures until after perusing the "Health Hints for the Household"; he could have picked up a whole lot of real first-class education, and a few pointers on infection as well. "Man and other animals, and especially their excreta, are the prime movers of infection." And again: "Cleanness or cleanliness means then the absence of dirt, and though an acquired taste——" Just like olives, sardellen, etc. But there is hope for the masses; they may acquire the taste—under the guidance and educating influence of the San Francisco Board of Health. Here's a suggestion of value: "A good disinfecting fluid is made by adding three tablespoonfuls of strong carbolic acid in a quart of water"—to what? It doesn't say; add it to any old thing; put it in your coffee. We call this to the attention of the Tuberculosis Committee: "A consumptive moving from house to house or from room to room, leaves the poison, chiefly in their expectoration (spit)." Certainly legislation should at once be enacted to compel houses and rooms to cease from expectorating (or spitting). It is a disgrace that it should be permitted! Please, good Board of Health, publish some more chunks of wisdom for the families of "infectious, contagious or communicable diseases."

The Publication Committee desires to thank those county society secretaries who have sent in reports of their society meetings.

TO COUNTY SECRETARIES. Thanks are also due a number of secretaries for the prompt manner in which they answer letters.

If there is one virtue more commendable than all others, it seems to be that of promptly answering a letter. There are a few secretaries who do not send in regular reports, or who did do so but have fallen from grace. Will you gentlemen please consider the value to your members of sending in these reports? It never happens, in all probability, that all the members of a society can attend any one meeting, yet all desire to know what has been done and what is going on. If the essential or interesting facts are embodied in a report—it may be a very brief one—that report will be printed in the JOURNAL and thus reach every one of your members, who will thus be posted as to exactly what your society is doing.

Furthermore, other county societies will see what things are being discussed or acted upon throughout the State, and the general interest in all matters of professional interest will be stimulated. We again ask each county society secretary to devote the few moments of time and labor necessary to this work, which is certainly for the general good of all.

We take pleasure in handing you a fairly full report of your last annual meeting. It was an excellent meeting and we certainly congratulate you upon it.

TO MEMBERS IN OREGON. While your Association is not large, it is in good healthy condition. Recognizing the fact that through physical necessity the Association could not enrol a very large membership, and that with a small membership the issuing of publications is a practical impossibility, the Medical Society of the State of California has now offered to your House of Delegates for two successive years, last year and this year, to surrender to your Association equal representative ownership and control of the publications issued by us, your southern neighbor. We proposed to change the name of our JOURNAL to one that should be mutually agreeable; to make it your journal just as much as it is our journal; that you should have your own publication committee and control the contents of your own section of such a journal; that it, and the yearly Register of Physicians, might be given to your members as a material and tangible return to them for their investment in the shape of dues; that you might thus have another and a very powerful lever in prosecuting the work of organization. Mind you, there was no question of simply making our journal your official publication: the question was much bigger and broader; it was an offer to share with you some of our property, and make it your property as well as our own. For some reason or reasons unknown to us, your Delegates did not accept our offer, and indeed, up to the present time, have not, except verbally and casually, advised the committee of our Society which made the offer, of their action. As the matter was not presented to the whole body of your Association by the Delegates, we take it that they do not believe your Association should share with us in the ownership of this property, and doubtless they have good and sufficient reasons for such determination. Should your Association, however, at some future time, care to reconsider the matter, we shall be pleased to take it up again. In the mean time, we will do all that we can to aid you in the work of organization, and in the matter of the approaching A. M. A. meeting, and to the extent of our abilities, in any other way you may suggest. You may be sure that you have a firm friend to the south of you, and you may know that it is our earnest wish that we may see a more closely united medical profession on the Pacific Coast.

We are sincerely grieved to learn that some members of the faculty of Cooper Medical College feel that there was the slightest animus against that institution actuating an editorial which appeared in the August JOURNAL, headed "The Value of Big Game." The editorial in question was absolutely impersonal; there was no feeling of antagonism or of unfriendliness in the mind of the writer nor in the thoughts of the members of the Publication Committee. There was just one thought involved, and that was exactly as expressed in the heading—the great value to the State of the precedent which might have been established, and the harm that might result from that which was established. There is no more honorable nor more ethical body of men in the State than the gentlemen who compose the faculty of this institution, and the last possible wish of any member of the Publication Committee, would be wittingly to hurt or offend them.

It was with no little surprise and a good deal of pleasure that we noted, in the September number of the *Journal of the New York Association*, the editorial published in the August number of the JOURNAL relative to the beautiful manner in which the trustees of the A. M. A. have composed the financial statement. It seemed hardly probable that another journal in the country would have the courage to print or comment on the matter we published. As a further matter of fact, there are a good many members of the Association who do not particularly care to invest \$3.50 a year in Chicago school bonds, or Chicago real estate which does them, nor anybody else, any good. The members of the Association are paying into its treasury something like \$40,000 a year more than it needs; they are paying enough to enable the Trustees to provide them with not alone the best journal in the country, but also with one which does not, in its every issue, make a laughing stock of the principles of ethics to which every member of the Association has subscribed. The Publication Committee is advised that one member of the Trustees looks upon the article printed in August on this subject as facetious. There is nothing facetious about it. There is not the slightest bit of facetiousness about the grafting that is being worked upon the medical profession through its complacency and with the paid-for assistance of the medical journals, including the "biggest advertising medium for proprietary remedies in this country," the *Journal A. M. A.* Every issue tends to debauch the mind of some of its members; it recommends to them all to make use of or prescribe secret remedies; it uses \$15,000 (about) of the dues paid in by the members of the Association to help in its work of "promoting the use of secret remedies." The Trustees of the A. M. A., who are responsible, may think this is facetious, but some day they

will awake to the fact that they had a good, long, complacent, pipe dream. Their contention that it is not possible to determine which ads are ethical and which are not, is simply absurd, puerile and idiotic. Let them answer these simple questions: Is it a medicine? Is the composition of this stuff known to the doctor who is asked to prescribe or use it? Are the advertising statements made within the truth? Is it advertised to the laity? In answering the second question it is not simply necessary that the composition shall be known to the editor, or the trustees, or the manufacturer, or to some other irresponsible person or persons; does the doctor who prescribes the stuff know exactly what his patient is going to take? Face-tious! Heaven save the mark!

It is time that every physician in the State took heed for the future. The State legislative body will assemble to tinker and tamper with the laws, before many months have passed, and it now seems absolutely certain that an attempt will be made to so modify the Medical Practice Act as to completely emasculate it. It is rumored that the eddyites have joined forces with some illegal practitioners and some disgruntled ones, and have provided and are providing a not inconsiderable fund for the purpose of attempting to upset the law. Let every physician in the State calmly consider the murders that would ensue were the doors thrown open to everyone, practically, who wanted to practice medicine, to do so. There are enough unfortunate mistakes made by those who have licenses, without piling up the legalized murders of a host of incompetents by throwing down or in any way relaxing the provisions of the law. Before he is elected is the time to find out just how your representative stands on the question of the Medical Practice Act, and there is no great amount of time to waste. Election day is coming on apace, and before we know it the tinkers will be busy. We have no large fund of money at our disposal, but we have an endless amount of energy; now is a pretty good time to use some of it, and in the direction indicated.

There are some individual members of the medical profession—and they are generally located far from big cities—who, by their courage, put to shame the do-nothing county medical societies, when it comes to warring on the illegal gentry. Two instances of the sort have come to the attention of the JOURNAL since the last issue. In Mendocino County, Dr. L. C. Gregory swore out a warrant for a "Dr." Diddle, worked hard to get the evidence to present, stirred up the district attorney to the point of action, kept at the thing until the case came to trial, and then saw all his work go to naught because of the friendship of a few jurymen for the accused. Several of the witnesses perjured themselves in the course of

the trial. It is a shame that county societies as such will not do their plain duty. The work would not be hard if they would only get at it. But it is so much easier to sit still and do nothing. The other instance occurred in Groveland, where Dr. W. H. Roberts went to a great deal of trouble and spent a good deal of time working up evidence against a notorious illegal practitioner, one Peshace. We do not know whether this trial has yet come off, nor the result. Certainly Drs. Gregory and Roberts are to be congratulated for their work and for what they have done to help clean up California. Please, gentlemen, do not grow discouraged; keep at the good work and in time you will shame others into giving you a helping hand.

One feature in the case of Diddle, the quack, is of especial interest. We are advised that within two weeks from the date of his trial, the jury disagreeing, two agents of the Pacific Mutual Life Insurance Company, of San Francisco, California, stated that this same Diddle had made several examinations for them for their company, *after the trial*. Now, they knew the man was an illegal practitioner; they had every reason to believe that he did not possess sufficient medical education to pass the state examinations, or he would have done so. They are guilty of carelessness and negligence—or worse—in having a presumably incompetent man examine a prospective risk of the company for which they are working. And furthermore, not only these agents, but the company that permitted them to allow such a quack to examine and report upon applicants for insurance, deliberately gave an insult to the reputable, licensed physicians of California. There is not the slightest reason or excuse for an insurance company allowing unlicensed "physicians"—quacks—to examine their clients; there are plenty of good doctors who have licenses, to do the work and do it well. Least of all should a California company ignore the laws of California by giving encouragement to its violators. We could make but one suggestion; let the "quacks" make all the examinations for those companies that pay less than \$5.00—refuse to make an examination yourself for less, and then the companies will surely get all that is coming to them.

The new Register and Directory is now on the press and ought to be issued during the first week in October. We shall do all we can to get it delivered as soon as possible, and the plan of last year will be followed. A number of copies corresponding to the number of members enrolled in each county society will be sent to the secretary of such society, who in turn will distribute them to the members. If you do not receive your Register by the 1st of November, write to your county society secretary and ask

**DANGER
AHEAD.**

**GOOD
WORK.**

**QUACKS AS
EXAMINERS.**

**THE NEW
REGISTER.**

him about it. It will be noticed that there is a large list of those whose addresses are unknown. We have written three times to the last known address, or have used every means possible to secure the present location. In many instances the letters have come back from the postoffice marked "Can't be found." We ask the help of every physician in the three coast states to locate these physicians and to give us prompt advices of the death of physicians in their vicinity, or of the advent of new ones. We have used the greatest diligence in correcting the Oregon and Washington lists, but doubtless there will be found many errors. These we shall endeavor to reduce in number during the year and bring those lists up to the standard of the California department. For the sake of easier reference, the town of location has been stricken from the general alphabetical list, and the county substituted for it. The county has also been placed at the top of each page, to serve as a running guide. Tinted paper has been introduced to further aid ready reference. The Publication Committee has given a great deal of careful thought to all of these details and sincerely trusts that the result of its labors will be satisfactory to you. Suggestions from members will be highly esteemed, and in every case will be carefully considered by the committee.

Very rapid progress has been made along certain lines of research in experimental medicine.

SERUM TEST FOR BLOOD.

While but little definite knowledge of the changes in serum due to immunization has been obtained, a large mass of facts and information relative to immunization, toxics and anti-toxics has been piled up. Many men in many places are working over these facts with the hope of sooner or later hitting upon the missing explanations. Into almost every branch and department of medicine has been injected the serum, in some form or other. Its medico-legal value has more recently been developed, and will undoubtedly become in time a very important asset of the court. The power to resist disease induced by grafting the disease upon the living animal in such a way as to secure the end desired without causing the death of the animal, has been recognized for many years in at least the one case of smallpox. Why this power of resistance is so induced, what brings about this immunization, are questions as yet unanswered. Why is it that the anti-substances which are produced by the presence of bacteria in the body will attack those particular bacteria and no others? We simply do not know, but we recognize the fact. The work of Gruber, Durham and Widal has attracted universal attention to the truth of these facts. It is the precipitins, one of the four classes of anti-substances that may be produced by the action of bacteria or of emulsions of various organs upon the blood, that bid fair to be of great value in medico-legal work. The posi-

tive determination of semen is stated to be a matter of great ease, by this method. The determination of blood stains will be of much more value and of more frequent use. Any previously known test could identify old, putrid or dried-up and dirty human blood, simply as blood, and not always even as that, to the entire satisfaction of the court. By the use of the new serum method, when properly handled and with full and proper control, Evans and Gehrmann claim that it is possible to determine human blood, no matter how old, dirty or putrid it may be, and in dilutions as great as 1 to 1,000,000; far beyond the power of any spectroscopic method.

Why in the world do so many people waste four years of their lives, and several hundreds of

dollars, at the least, in order to acquire a medical education? It is **EDUCATION USELESS.** perfectly useless when acquired.

All that is really necessary, to practice medicine, is to take a large number of medical journals, read carefully the directions given by the advertisers, act in accordance with their instructions, and there you are. It need not be the business of the "doctor" to know what the sick or supposedly sick person is taking; the manufacturer knows that; he is making life easy for the doctor. His is the heavy burden; he must find out what is the right thing for the patient to take under given circumstances, and all you have to do is to obey him exactly. For instance: "Doctor, I need a tonic." The next time a patient says this to you, write a prescription for Colden's Liquid Beef Tonic. The patient may be right." There you have it. Don't you see? The patient makes the diagnosis, and "he may be right"; the manufacturer makes the stuff for him, and you are instructed to order him to take it; it may do him good; or it may "do him" good and plenty; you cannot tell. But the all-wise manufacturer knows what you should do, and tells you to do it. There is, of course, the odd chance that the patient may be suffering from nephritis, a heart lesion, or something else that would require far different stuff from what may be contained in the "tonic"; but that is none of your business—the manufacturer assures you that "the patient may be right." Can the mind of man conceive impudence carried to a greater extreme! And we let this sort of thing go on! We, the members of a liberal profession, supposedly possessing brains and special education, permit this unmitigated, insulting impudence!

There seems to be more or less complaint all over the country in regard to the hodge-podge appearance of the average drug store.

A CURIOUS CONDITION. and the large number of proprietary medicines and nostrums carried and sold by the average druggist. There is also talk, in many quarters, about office dispensing by the physician. The situation is certainly

interesting. As has been pointed out by the JOURNAL, a very large part of the responsibility for the nostrum-proprietary business is directly traceable to the doctors themselves, who have been worked by the smooth-tongued detail man, and in turn have, probably unconsciously, worked the druggist. Let it be understood once for all that the detail man is not a perambulating educator; he is paid to sell goods or develop a demand for them; it does not matter how he does this, so that he does it. The doctor orders or prescribes a lot of secret-formula stuff, and the druggist is forced to carry it; the druggist finds he too can make a little money by carrying other lines of secret-formula stuff, and does it. Then the doctor turns around and severely criticizes the druggist for departing from his former ethical position. Yet at the same time he depends more than he imagines upon that very same druggist for his knowledge of materia medica. For example: Within the space of two hours, three physicians, all of whom have been in practice more than ten years, came into a certain drug store and left prescriptions which the druggist had to tell them were composed of incompatibles. It was the druggist who had to, on request, suggest the proper ingredients for these same prescriptions. There passes hardly an hour, in any large drug store, that the druggist is not asked by the doctor for information or assistance in questions of materia medica. The degree of dependence of the average doctor upon the average druggist, is not appreciated. Yet let us, by all means, continue to roast the druggist for keeping a junk-shop.

ANOTHER STATE SOCIETY JOURNAL.

"*Journal Missouri State Medical Association*" is the title given to the newest state association journal. It is a very good looking and exceedingly business-like publication, and we believe it will live and do its appointed work. Dr. C. M. Nicholson is the editor, and he, with the assistance of his publication committee, will undoubtedly give the members of the Missouri State Association a first-class journal which will materially aid organization work in that state. In the friendliest spirit possible, we would suggest to the publication committee the necessity for not only a passive but an active war upon the nostrum business and all the other forms of rank quackery that have been so skillfully grafted upon the medical profession by unscrupulous manufacturers during past years. The time has long since passed when we can afford to ignore the rank prostitution of our profession to the commercial desires of nostrum manufacturers. Any preparation of which the active ingredients are unknown, is a nostrum—a secret medicine—a quack remedy—and when a physician uses such stuff he is injuring both himself and his patient, to say nothing of the pharmacist. And furthermore, he is bringing disrepute upon his profession and making himself ridiculous in the eyes of the very commercial ones

who so easily "work" him. Take, for example, the stuff the Gardner-Barada people are so extensively advertising—"uresepin." What it really is, no man knoweth (probably even the manufacturers themselves, do not know!); what it contains is a mystery; the doctor who gives it to his patient does not know what the patient is taking, and may be giving him something that will be highly injurious. This concern at first published a most wonderful and fearful formula with their advertisements. On investigation this "formula" was found to be an absolute lie. Then the concern modified the formula; now they seem to have withdrawn it almost altogether. The *Journal of the A. M. A.* publishes a lot of advertising of this sort, and because it is guilty of breaking to smithers the A. M. A. "principles of ethics," most medical journals of the country do the same thing, and for excuse proudly boast that the advertisement appears in the *Association Journal*, and hence it must be all right. The "uresepin" case already cited is rather a good illustration for the reason that the "ad." was thrown out of our JOURNAL some months ago (as soon as we learned of the fakeness of the "formula"), but is to be found in many journals, among them the *Missouri Journal*, and the "greatest advertising medium for proprietary medicines in this country"—the *Journal A. M. A.* In all probability the publication committee of the Missouri Association did not know any reason for not accepting this advertisement; the members of the committee probably do not know as much about the matter of nostrums and advertising as they will in another year or two! Unfortunately, this excuse cannot be given by the *Journal A. M. A.*

PROGRAM FOR THE NEXT MEETING.

The Committee on Scientific Program for the next meeting of the society has already done considerable work. The time at our disposal, under the present arrangement, will give three full days. The tentative program, at present under discussion by the committee, is to have general symposia in the three forenoons, and section meetings on two of the afternoons, leaving the third afternoon for a drive through the beautiful country about Riverside. One of the forenoons will be devoted to "General Hygiene," "Milk," "Tuberculosis," "Vital Statistics" and "General Public Policy and Legislation." The topics for the two remaining morning symposia have not been definitely chosen, but the following have been mentioned, and suggestions from members of the society are earnestly requested: "Typhoid Fever," "The Stomach," "Diabetes," "The Spleen." Please give this matter your attention, and make such suggestions as may occur to you. The afternoon sessions have been tentatively arranged as follows: One afternoon, "Sections on Genito-Urinary and Skin Diseases," simultaneously with the "Section on Medicine, Pediatrics and Obstetrics"; the second afternoon, "Section on Diseases of the Eye, Ear, Nose and Throat," simultaneously with "Surgery and Gynecology." It is also desired to arrange symposia for the section meetings, and suggestions under this head will be very highly appreciated by the committee. Communications should be addressed to the chairman, Dr. Wallace I. Terry, 751 Sutter street, San Francisco.

INFLAMMATION OF APPENDICES EPI- LOICÆ AND INTESTINAL DIVER- TICULA.*

By EMMET RIXFORD, M. D., San Francisco.

OF THE frequency with which the fatty appendages of the large bowel are the seat of inflammatory processes of sufficient severity to warrant description, little can be said because of the paucity of reported cases. That the appendices epiploicæ may be the seat of isolated foci of infection from intestinal diverticula has been known for some time, but the fact has been of interest chiefly to the pathologist. The matter has real clinical significance, however, since there is found therein an explanation otherwise wanting of the occurrence of certain inflammatory conditions within the abdomen.

The two following cases may be taken as typical:

George A., Syrian, aged 35, was seen by the writer in September, 1903, in consultation with Dr. Riley of San Francisco. He then gave the following history: He had been troubled for several years with constipation, but otherwise had had generally good health. Six months ago he had an attack of abdominal pain, lasting a few days, accompanied by nausea. For the last six months he has not been well, having had a great deal of discomfort in the abdomen, and having suffered with obstinate constipation and loss of appetite. He lost twenty pounds or so in weight, and was generally miserable. Three weeks ago he had a sudden attack of severe abdominal pain, chiefly in the left side.

This history of recurring attacks of colic, with nausea and some fever, was very much that of a chronic appendicitis of mild degree, and the findings, on examination, presented an apparently typical picture of left-sided appendicitis. There was slight fever, rapid pulse, marked tenderness and rigidity of the left hypogastrium, and considerable distention. By dint of frequently applied enemata the lower bowel was emptied, when a tumor the size of a walnut became evident. It was situated a little above Poupart's ligament on the left side; was hard, irregular in outline, and fixed to the posterior wall of the iliac fossa. The tumor was quite tender to the touch, but there was no other tender point in the abdomen.

The diagnosis lay between a tumor of the intestine, with perforation, or at least ulceration, causing inflammatory symptoms, a so-called left-sided appendicitis and inflammation of one of the appendices epiploicæ. Carcinoma of the colon seemed improbable from the age of the patient, the generally good health, the early onset of the tumor, the marked inflammatory symptoms in recurrent attacks. A left-sided appendicitis is apt to present some inflammatory mass palpable through the rectum, and more or less tenderness in the region of the head of the cecum, and pain referred at least in the beginning to the navel. These symptoms were absent in this case, so it seemed probable that the tumor was an inflamed appendix epiploica as described by Hansmann, Glaser and others.

On September 5th, under chloroform, an incision was made parallel to Poupart's ligament, corresponding to the ordinary incision for appendicitis. The tumor was found to be connected with the colon and adherent to the iliac peritoneum, from which it was separated much as one would separate an inflamed appendix vermiformis similarly adherent. When lifted out of the incision it was seen to consist of an appendix epiploica, which was greatly enlarged, was black though not gangrenous, and adherent to adjacent portions of the colon. When these adhesions to the colon were freed the pedicle, which was very small, was ligated, and the mass removed. Because of the inflammation present and the evidently damaged condition of the bowel wall at the site of the pedicle, the stump was buried by a row of fine silk sutures and a neighboring appendix epiploica anchored over the suture line. No macroscopical connection of the interior of the inflamed mass with the interior of the bowel was made out, but the suture was intended to close any small communication which might be present. The bowel was returned to the abdomen and the wound closed. The wound healed under one dressing, but as soon as the patient was put upon solid food he was again troubled with distention with gas, the result of imperfect digestion, due to hyperchlorhydria. The patient was much more comfortable on a proteid diet. By recent report the patient is greatly improved in general health, there has been no return of the inflammatory attacks, and the constipation is less troublesome.

The second case is similar. Mrs. T. G., age 55, Swiss, patient of Dr. Gibson of Bolinas. She is the mother of ten children, has always been a strong, hard-working woman, and until comparatively recently has enjoyed uniformly good health. For several years, however, she has been obstinately constipated. She would have the desire to go to stool, and would strain with disproportionately small result. She was finally obliged to resort

to the use of high enemata with a long colon tube. Cathartics were effective only in large dosage. She further complained of frequent attacks of annoying pain in the abdomen, colicky in character but not of great severity. The pain was generally more marked on the left side.

On examination (February, 1904) she presented the following condition: Short but very fat woman, past middle life; abdomen pendulous; definite though not great tenderness in left iliac fossa; some muscular resistance in left hypogastrium, but no definite tumor palpable from in front; perineum torn and very lax; marked rectocele, cystocele and procidentia; laceration of cervix; ovaries palpable but small; on left side high up a tumor mass of the size of a hen's egg attached to pelvic wall, but not to uterus or ovary.

Under chloroform anterior colporrhaphy, trachelorrhaphy and perineorrhaphy were performed and the abdomen opened. The ovaries and tubes were normal. The tumor felt from below proved to be an inflammatory mass connected with the pelvic colon and adherent to the peritoneum about the brim of the pelvis. The mass was loosened, brought out through the incision, and found to consist of inflammatory material containing a greatly enlarged appendix epiploica. On cutting across the pedicle a small opening was found leading into the interior of the intestine. This opening was closed with fine silk, and the abdomen closed. Recovery was uneventful.

The cause of such isolated foci of inflammation in the appendices epiploicæ is in most, if not all, cases the formation of minute diverticula in the wall of the intestine, which were shown by Klebs, Hansemann and others to occur at the points where the blood vessels traverse the muscular coats of the bowel to reach the mucous membrane. In a paper before the German Surgical Congress of 1899 Graser, of Erlangen, reported the finding of a large number of such so-called false diverticula at autopsy in a case of cardiac insufficiency in which there was great venous stasis in the abdominal vessels. Graser thought he saw in the venous stasis the cause of the dilatation of the orifices in the muscles through which the vessels pass, and looked upon the straining at stool as the exciting cause of the projection of the mucous membrane through the muscle. Hansemann, however, and one of his students disputed the suggested influence of the venous stasis, and called attention to the observation that these diverticula are much more common in fat intestines, the vessels in the muscular wall being surrounded by considerable deposits of fat, making weak places in the wall through which intra-intestinal pressure of gas and feces would drive minute pockets of the mucous membrane.

Given even minute diverticula with intact mucous membrane the pockets are apt to be filled with more or less inspissated feces, which by pressure cause necrosis of the lining epithelium and open the way for infecting micro-organisms to pass out into the connective tissue of the bowel wall, causing more or less widespread inflammation. Such inflammation may lead to a mild degree of local peritonitis, resulting in adhesions or, as is more frequently the case, the infection may travel along the blood vessels and find its way into neighboring appendices epiploicæ. These false diverticula are, therefore, apt to be bottle-shaped, with wide fundus and narrow neck. Hansemann has reported as many as 400 such diverticula in a single intestine. They are far more frequent in the sigmoid flexure than elsewhere in the bowel, although they have been found in the transverse and ascending colon, as well as the rectum.

In the first case here reported the diverticulum, if present, was too small to be seen with the naked eye. The presence in that case of marked inflammation, with hemorrhage and fat necrosis in the appendix epiploica, suggests that after the invading bacteria once get through the mucous membrane they travel along the blood vessels in the open connective tissue spaces into the appendices, or by a process of thrombosis cause a localized phlebitis, with consequences similar to phlebitis elsewhere.

From a clinical standpoint it is of interest to note that the inflammatory processes induced by these diverticula are generally of mild degree, and rarely comparable to rapid cases of appendicitis. Still the

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

resemblance to appendicitis proper is in cases so great that such an inflamed appendix epiploica has been removed, the surgeon believing he was removing the appendix vermiformis. Hansemann has shown that these diverticula are not always so innocent, but may become the means of causing tension necrosis and serious peritonitis. It is further evident that the adhesions set up by such inflammatory processes may result in anchoring the bowel, interfering with its function, and may form bands beneath which the intestine may be caught and strangulated.

The diagnosis is not always to be made; i. e., a differential diagnosis from certain forms of appendicitis from some other inflammatory tumors and from new growths of the bowel wall. A history of recurrent attacks of inflammation on the left side without tenderness over the base of the appendix vermiformis; a history of chronic and severe constipation, the formation of a tender tumor in the left iliac fossa would strongly suggest an infection of this character. The common tumor in the wall of the large bowel is the adeno-carcinoma which contracts and causes an annular constriction of the bowel. The symptoms here are those of carcinoma of the internal layers, but if the tumor be of slow growth there may be no symptoms beyond those consequent upon a gradually increasing obstruction. If the carcinoma is low down, it is apt to impress its form on the fecal mass, and in turn to be lacerated by the passage of large masses, resulting in slight bleeding.

Even if in a given case an anatomical diagnosis cannot be made with certainty, the symptoms are apt to be sufficiently definite to furnish the indications for operative treatment.

Of the treatment little need be said, as it is evident that operative removal of the mass, with repair of the bowel, is the only rational procedure in the severe cases as a matter of necessity; in the mild cases, for the removal of adhesions and dangerous bands and the prevention of future serious trouble. The relief of the chronic constipation, which plays so prominent a role in the etiology, is not less important as a prophylactic measure.

THE CONSERVATIVE TREATMENT OF ACUTE APPENDICITIS.*

By A. W. MORTON, M. D., San Francisco.

THE SUBJECT of appendicitis has been more thoroughly discussed by medical men and the laity during the past decade than any other medical topic. Regardless of this, there still remains a wide difference of opinion in the treatment, and a grave mortality, which is evidence that we have not thoroughly mastered the subject. The disease is far more prevalent than is generally supposed. Observers have found on postmortem examinations that from 30 to 40 per cent give evidence of having had appendicitis during life.

In bringing this subject before you it is not that I have anything new to offer, but to make an appeal to be more conservative in the time you select to operate.

The disease of the appendix has been observed by many writers during the past century, but it was not accepted by the medical profession until 1886, when Dr. Fritz of Boston convinced them that most of the cases of peritonitis were caused by appendicitis.

The appendix is located in the right iliac fossa, and seldom wanders from that location. It is attached to the lower end and back part of the cecum, and is very similar in structure, except that it is poorly developed on account of not having any special function, and a poor blood supply. Its location corresponds to a point about two inches from the anterior superior spine of the ilium directed to the umbilicus, known as McBurney's point.

The causes of appendicitis have varied to suit the opinions of different authors, from foreign materials to a meat diet. The most rational cause is that of defective drainage from mechanical obstruction, or pre-existing disease, which leaves the appendix in an unhealthy condition, and makes a proper soil for the bacillus coli communis, or some pus infection, which, under ordinary conditions, would be harmless. Typhoid fever, dysentery, indigestion and many other diseases may act in preparing the way for the germ which is always associated with the disease. Appendicitis is generally divided into various classifications which simply represent different stages of the disease, whether it be catarrhal, suppurative or gangrenous.

The symptoms of acute appendicitis are of such marked character that any one who has had any experience with the disease should readily make a diagnosis. The four cardinal symptoms—pain, tenderness, gastro-intestinal disturbance and rigidity of the muscles—in conjunction with the constitutional symptoms, will be of great value. The pain is generally acute, and first felt in the region of the umbilicus, and radiating over the entire abdomen. After the pain lasts a few hours it becomes more fixed in the region of the appendix, and the tenderness soon becomes localized here. The disease is often ushered in by vomiting, which consists of the food in the stomach, and later the secretions from the upper part of the intestinal tract. The rigidity of the abdominal muscles over the appendix is a very valuable symptom, not only in making out the diagnosis, but differentiates it from other abdominal lesions. The pulse and temperature are valuable signals as to the condition of the patient, but only in conjunction with the cardinal symptoms are they valuable in arriving at a diagnosis.

The leukocytosis is of importance in conjunction with the other symptoms in not only arriving at a diagnosis, but differentiates it from other diseases, as typhoid fever. It is of much value in indicating the severity of the disease. J. Da Costa (1) claims when it reaches 20,000 or more that pus has formed, and requires immediate operation. I believe that 20,000 or more does not only indicate that pus has formed, but, in conjunction with other symptoms, that it has passed beyond the confines of the appendix, and we have an effusion into the peritoneal cavity, and is one of the symptoms that not only confirms the diagnosis, but should deter the surgeon from operation so long as the count remains above 20,000. The pulse remaining above 116 and the other symptoms exaggerated are special indications that operation should be postponed until the general condition is better. This is the hopeless class of patients which give the ever-ready surgeon his mortality. The surgeon generally says he will give the patient the last chance (operation), which is too often true.

Operation at this stage will generally find the pus free in the peritoneal cavity. You may succeed in removing the ruptured or gangrenous appendix, but not the infection, as it is now a constitutional sepsis, and not local. The infection has not only spread over the abdominal cavity, but the operation produces trauma of the peritoneum and omentum, which are the life preservers of the abdominal cavity, and it inhibits their action in antagonizing the infection, to say nothing of the depressing effect of the anesthetic.

Many of our best medical men and surgeons, as Osler, Deaver, Price and Murphy, have considered appendicitis a surgical disease at all stages, and have recommended operation as soon as diagnosed, regardless of the stage. I believe such teaching as this has and is doing a great injustice. Many physicians under unfavorable circumstances, and without the proper amount of experience, and often at the time the case becomes very serious, will operate, because they have been led to believe that surgery offers the only hope

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

of relief. There is possibly no place in which this advice has been more used or abused than in this country.

I believe all surgeons agree that to operate early in the disease and under favorable circumstances offers more hope than any other form of treatment; and that it is the only method which will cure the disease. The mortality at this time should be very low, as there is practically no danger of infection so long as the pus is confined to the appendix. I believe in not limiting this period to twenty-four or forty-eight hours, which is the preferable time in acute cases, but if the patient's condition is reasonably good, which is judged by the pulse, temperature, leukocytes less than 18,000, and the general symptoms which convince me that the pus is confined to the appendix, I always operate. If the patient has passed into the stage of sepsis, when the pus is no longer confined to the appendix, and it will be impossible to remove the sepsis, the pulse rapid, the abdomen tympanitic, vomiting, with all the local symptoms exaggerated, and leukocytes above 20,000, I do not operate, as it is this class of patients where we get the heavy mortality. McBurney has said, "Often the surgeon is called too late for an early operation, and too early for a late operation." The statistics of Richardson (2) in operation for acute appendicitis show a mortality of 18 per cent; Deaver (3), 16 per cent; Broca (4), 33 per cent.

If the experienced surgeons, under favorable surroundings, have this mortality, may we not expect even a heavier mortality with the less favorable ones, if acting under the same teachings? Surgeons seem to be a unit in the belief that acute inflammation should be treated by rest in every part of the body except the abdominal cavity; and here, under all conditions, we are to give cathartics, such as magnesia, which keep up the peristaltic action of the bowel, and constantly irritates the inflamed appendix, which will not only keep the effusion from becoming walled off, but may carry it over the general peritoneal cavity, and will even break down adhesions which have formed. In my opinion rest is especially indicated in the treatment of appendicitis, and I believe all acute cases can be carried through the attack and the patient operated upon in the intervals with a mortality less than 4 per cent, which has been the statistics of Oschner (5).

This treatment is to give the patient nothing by the mouth in the way of food or cathartics until his condition makes the operation safe. All forms of food administered by the stomach have a tendency to start peristaltic action of the bowels. Water can generally be administered in small doses per mouth. If the patient is vomiting, gastric lavage should be used, which will stop the vomiting and relieve the pain and distress. The nourishment is kept up per rectum by using salt solution or some predigested foods in small quantities every few hours. If the lower bowel is full, I generally empty by enema. I have seldom found it necessary to keep up rectal nourishment longer than a week, as the patient's pulse, temperature and general vitality have improved by this time. During this period the patient is rendered more or less immune to the infection, and the pus is not so virulent, as it has been walled off and the patient has passed beyond the condition where operative procedure gives such mortality.

During the past two years I have treated forty-five patients with acute appendicitis (not chronic or recurrent cases); twenty-seven of the patients were operated upon during the first to the fifth day, with one death. Two were treated through the attack, and refused operation. Sixteen of the patients were treated from four days to two weeks, and then operated upon, with one fatality. The first fatality, a young man 22 years old, had been sick three days when he entered the hospital with acute appendicitis;

pulse, 116; temperature, 103½; leukocytes, 27,000, and with all the local symptoms exaggerated with vomiting. Consultant demand immediate operation, which was done. We found a ruptured appendix, with a small amount of pus which was not walled off. The appendix was removed and drainage established; patient died five days later with general peritonitis. I am confident if this operation had been delayed and the patient treated by rest we would have saved the patient.

The second fatality was Mr. D, age 45. I saw him the second day of the attack, in consultation; patient was suffering with all the symptoms of appendicitis; immediate operation was advised, but refused; he was placed under the rest treatment, and improved by the end of the first week, when we insisted on operation, but were again refused. Patient was started on a liquid diet per mouth, but immediately began to grow worse; the food was stopped and rectal nourishment resorted to again, but his symptoms continued to grow worse. On the twelfth day of his illness I opened the abdomen and found the pus from an appendix abscess had burrowed beneath the liver. This is a type of a case in which the patient was in excellent condition for operation when first seen, and again at the end of the first week; after that the abscess began to wander, which was indicated by the renewal of the acute symptoms with an increased leukocytosis. This is one of the dangers we may meet in this form of treatment.

I take one history from the cases where operation was delayed on account of the severity of the disease. Miss M., age 21, had suffered several attacks of appendicitis, and had been sick three days when I was called in consultation. Patient had suffered very severe pain the night before, and had a dose of morphine to relieve her. Her temperature was 105½, pulse 125; abdomen very sensitive, and especially over the region of the appendix; leukocytes, 27,000; hemoglobin, 80. The patient was sent to hospital, placed on rectal nourishment and a little water per mouth. On the fourth day of the treatment pulse was 84, temperature 99, leukocytes 10,500. Patient's condition was so much improved that consultant thought we had been mistaken in the diagnosis. One day later abdomen was opened, we found abscess walled off, with entire appendix sloughed, which was removed in toto by lifting out with forceps, and the cavity drained. Patient made a complete recovery.

In all cases operated on after delay the diagnosis was confirmed. Before adopting this method of selecting the time for operation, I followed the accepted teachings, to operate when the diagnosis was made, and especially when the case appeared hopeless. When I found the appendix gangrenous, or a large quantity of pus free in the abdominal cavity, and following this a mortality, I satisfied my conscience that the patient could not have recovered with any other form of treatment.

I am convinced that the rest or Oschner treatment will assist the surgeon in carrying his delayed acute cases to a safe period for operation. The physician can safely treat his cases until he has proper surgical assistance.

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Unimproved Chicago.

Medicine, in an interesting editorial, says that 80% of Chicago real estate is unimproved. This is certainly surprising, and many people who know their Chicago but casually may be skeptical or regard this as a typographical error for what should have been 98%.

CASES OF ACUTE SUPPURATIVE APPENDICITIS TREATED BY THE OCHSNER METHOD.*

By WALLACE I. TERRY, M. D., San Francisco.

I SHOULD feel like apologizing to this society for presenting a paper on the time-worn topic of appendicitis if it not that my experience in dealing with several cases of the acute suppurative form by the Ochsner method has been so fortunate that I wish to record my belief in the rationality and value of the procedure. I have not included in my list those cases in which an operation was done within the first thirty-six hours of the attack, nor those in which there was simply an acute catarrhal condition of the appendix.

The plan of treatment which Ochsner announced several years ago is based on the principle that peristaltic movements of the intestines are instrumental in diffusing a peritoneal infection, which would otherwise tend to become localized or be absorbed. I quote as follows: "1. Patients suffering from chronic recurrent appendicitis should be operated upon during the interval. 2. Patients suffering from acute appendicitis should be operated upon as soon as the diagnosis is made, provided they come under treatment while the infectious material is still confined to the appendix, if a competent surgeon is available. 3. In all cases of acute appendicitis, without regard to the treatment contemplated, the administration of food and cathartics by mouth should be absolutely prohibited. 4. In case of nausea or vomiting or gaseous distention of the abdomen, gastric lavage should be employed. 5. In cases coming under treatment after the infection has extended beyond the tissues of the appendix, especially in the presence of beginning diffuse peritonitis, conclusions three and four should always be employed until the patient's condition makes operative interference safe. 7. In case no operation is performed, neither nourishment nor cathartics should be given by mouth until the patient has been free from pain and otherwise normal for at least four days. 8. During the beginning of this treatment not even water should be given by mouth, the thirst being quenched by rinsing the mouth with cold water and by the use of small enemata. Later, small sips of very hot water frequently repeated may be given, and still later small sips of cold water. There is danger in giving water too freely. 9. All practitioners of medicine and surgery, as well as the general public, should be impressed with the importance of prohibiting the use of cathartics and food by mouth, in cases suffering from acute appendicitis. 10. It should be constantly borne in mind that even the slightest amount of liquid food of any kind given by mouth may give rise to dangerous peristalsis. 11. The most convenient form of rectal feeding consists in the use of an ounce of one of the various concentrated liquid predigested foods in the market, dissolved in three ounces of warm normal salt solution, introduced slowly through a soft catheter inserted into the rectum a distance of two or three inches. 12. This form of treatment cannot supplant the operative treatment of acute appendicitis, but it can and should be used to reduce the mortality by changing the class of cases in which the mortality is greatest into another class in which the mortality is very small after operation."

The cases are, briefly, as follows:

Case 1.—E. S., colored, age 30. Entered the City and County Hospital May 6, 1903, in a state of collapse. The abdomen was very much distended, tender, with dullness in the flanks and in the right iliac region. Vomiting and great restlessness were prominent features. The history and findings led to the diagnosis of a perforation of the appendix four days previous to admission, with present diffuse peritonitis. A rigid Ochsner treatment was immediately instituted. In addition an ice bag for the relief of pain was applied to the abdomen, as was recommended by Ochsner in some of his earlier communications. The

change in the patient's condition which resulted within twenty-four hours was marked, and he continued to improve until the twelfth day, when a small abscess was manifest in the right iliac region. This was opened and drained, about half an ounce of pus being evacuated. A fecal fistula formed six days after the operation, the patient having gotten out of bed against orders, but it closed spontaneously in ten days. The leukocytes were subnormal throughout, except for one count of 8,200.

Case 2.—H. C., age 23, entered the City and County Hospital with a distended abdomen, with dullness, pain and tenderness in the right iliac region; leukocytes 20,550. The history of the case pointed to an explosion of the appendix four days previously. Under the Ochsner treatment the leukocytes gradually dropped down to 6,800, and by the tenth day after the beginning of the attack there was evidence of a localized collection of pus in the region of the appendix. A Sonnenburg incision along the crest of the ilium was made, the peritoneum pushed upward, and about four drachms of pus drained through a low incision into the peritoneum. Healing of the wound by granulation was without incident.

Case 3.—C. H., age 17, gave a history of several sharp attacks of appendicular colic during the previous three weeks. The last one had occurred three days before admission. Vomiting quite frequent, abdomen moderately distended and tympanitic. Pain and tenderness marked over McBurney's point and along the colon. Leukocytes 18,000. Ochsner treatment begun at once, and ten days later an appendectomy was done. The appendix was large, filled with pus, and adherent at its tip. Wound closed and healed per primam.

Case 4.—J. G., age 52, had been ill for a fortnight with distress in right side of abdomen. Two days ago he experienced a severe pain in lower abdomen after heavy eating, accompanied by vomiting. Not obtaining any relief, he went to the City and County Hospital, where I saw him the same day. An area of dullness could be made out in the right iliac region. Pain and tenderness over whole abdomen. Leukocytes 40,000. Three days later, under the starvation treatment, the leukocytes were down to 16,000, and an operation disclosed a ruptured and gangrenous appendix in a walled-off cavity. Wound drained. Convalescence interrupted by a phlegmon of the abdominal wall.

Case 5.—J. S., age 14, was seen by me, in consultation, November 28, 1903. Four days previously had very severe cramps in upper abdomen, followed some hours later by chills, sweats and clonic contractions of the legs. No vomiting. Examination showed the abdomen tympanitic, very much distended and excessively tender, especially in the right lower quadrant. Leukocytes, 14,600. Diagnosis of acute perforative appendicitis with diffuse peritonitis, and the Ochsner plan of treatment adopted. Ten days later an abscess having formed in the right iliac region, it was opened by the Sonnenburg incision, and an ounce of pus evacuated. The tip of the appendix was floating in the abscess cavity, and the rest of it formed part of the limiting wall. Wound drained and patient entirely well in a month.

The above cases are fairly typical of a class in which the mortality is usually high—from 12 to 30 per cent. The statistics of Ochsner and of Mayo show an immense reduction in their mortality rates for acute appendicitis since using the starvation plan, they now being but 3 to 4 per cent. The bitter opposition to this plan of treatment which manifested itself shortly after Ochsner's announcement has evidently died down in great measure, for I find the following in a recent paper by Deaver, who was one of the principal opponents, and who has for a number of years taught the doctrine, "Operate as soon as you make the diagnosis": "In the class of cases in which the medical attendant has not been called in for two, three or four days after the onset of the attack, and when the case has advanced to general peritonitis, with marked distension of the abdomen, high temperature, rapid pulse, persistent sick stomach and torpid bowel, the treatment recommended by Dr. Ochsner of Chicago, known as the 'rest treatment,' will, perhaps, accomplish the most."—*Kansas City Medical Index-Lancet*, March, 1903, page 81.

In several cases of peritonitis due to other causes than appendicitis I have employed the Ochsner treatment. It may be that the Fowler position, with the head of the bed raised, will be of assistance in confining infections to the pelvis.

Please notify us at once of any change in your address. Medical Society of the State of California, Room 1, Y. M. C. A. Building. Philip Mills Jones, M. D., Secretary.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

Discussion on Preceding Papers on Appendicitis.

Dr. A. S. Lobingier, Los Angeles.—I was very much interested in the report by Dr. Rixford on the inflammation of the appendages epiploicæ. I have been called upon within the last year to operate on three cases that were supposed to have been appendicitis. I have seen a number of cases where the adhesions in the left iliac fossa in women to the appendages of the appendix epiploicæ seemed as though the inflammation might have begun in the descending colon. We have the same condition prevailing in respect to inflammation extending from the tube to the appendix or from the appendix to the tube on the right side. I think that the observations which have been cited are undoubtedly entitled to the best credence, because they were accurate and scientifically conducted. There must be some anatomic conditions in the mucosa which will admit the infectious material into the appendages. I was very glad, indeed, that Dr. Terry defined so accurately and so distinctly just what Dr. Ochsner believes and practices. Only in this accurate definition can we have the basis upon which to predicate any arguments. I am satisfied, from listening to this paper, that Dr. Ochsner is very seriously misunderstood. I heard his discussion at Saratoga, and talked to him personally, as well as to Dr. Mayo, and I am satisfied, from the literature which we are seeing, that both of these gentlemen are misunderstood. I will also state that Deaver is misunderstood. I was surprised, even in 1903, at a report of 566 cases by Deaver not even mentioned, in which he shows a mortality of only 5 per cent, and he does not follow the Ochsner method of treatment. Out of this turmoil of appendicitis there must be some truth. There cannot be a doubt that these masters who have observed this matter for years and studied it are earnest and honest in their observations, and that in the careful selection of cases we are going to find analysis of this subject. It seems to me that the great wrong is done in the miscellaneous studying of the exact teaching of these men. Dr. Murphy stated at Saratoga that he was satisfied that there was not such a disparity of views. My talk with Mayo showed me that their ideas were not widely apart. Mayo said: "I have found in these cases of three to four days that it is advisable to give rest, wash out the stomach and give the alimentary canal rest for two to four days as indication may require; then operate. I am satisfied that I have lost recently two patients that might have been saved, because I delayed operation longer." We all have respect for Mayo. We know Dr. Van Zwalenburg to be an earnest, hard-working man. I am very sorry that I have to differ with him in his results. The pathology of the appendix has been progressive pathology. I have never known what the catarrhal appendix is. Appendicitis is a progressive condition which starts in the mucosa, and interferes with the circulation; it is a progressive inflammation from the mucosa and the serosa, and according to the virulence of the germ it is severe and rapid. That is a law in infection. Dr. Van Zwalenburg has taken a curiosity, which we do not often see, upon which to predicate his theory. He has ligated the appendix under the serosa. You cannot ligate any portion of the viscera under the serosa and not get gangrene. It is an impossibility to cut off the blood supply without getting gangrene. It is a violence to any pathology to get an edemic increase in an organ which we observe in hyperemic necrosis.

Dr. J. H. Barbat, San Francisco.—The anatomical position of the appendix is what gives us the protean symptoms even when the pathology is the same. You have the appendix inflamed in one position or another, but it depends upon the position in the person's belly. The question of operation is one of judgment. You cannot formulate any rule which will hold in

every case. You have to use judgment, leukocytosis or no leukocytosis. The individual who has pus is going to die unless you cut down before the infectious condition has reached the peritoneum. In those cases we have a chance if we open soon enough and place the patient in Fowler's position, so that the material may gravitate to the lower part, and we can remove it slowly. The worst cases which we come across are perforation of the tip, because when the tip of the appendix is perforated we may have it on the left side or up near the stomach. These cases are delayed, and are the most fatal cases. The so-called acute cases of appendicitis are merely the manifestation of a chronic case in the peritoneum. These are not cases which are started in the last hour or two, but have had appendicitis for months or years, and some sudden complication has arisen or a stone or band or kink has caused a sudden distention of the appendix. If the obstruction continues, the thing passes on to a condition demanding operation. But every operator has to use his own judgment and good common sense as to whether to operate or not, and when.

Dr. J. Rosenstirn, San Francisco.—I would like to call attention to a very dangerous proceeding that Dr. Van Zwalenburg has executed in the treatment of his patients; it is drawing off the material by an aspirating needle. I believe this method ought to be discarded by all surgeons who value the possibility of infection where they can control it. I would seriously condemn such proceedings, and I hope that it will not be imitated. Another point I would like to draw attention to with this very feature of pathology and symptomatology of peritonitis is what is called the heart death from pressure on the diaphragm. It is a vast distention of the stomach pressing upward on the diaphragm and pressing on the heart and interfering with the circulation and with the contractions of the heart. The constant and oft-repeated lavage of the stomach has been recommended and done with excellent results. It was not Ochsner who originated this idea of lavage of the stomach, but Dr. Liebermaster practiced it many years ago.

Dr. Le Moyne Wills, Los Angeles.—I would like to say with regard to Ochsner and Deaver that they have not changed their positions at all in the last four years. If they have been misunderstood so widely, as Dr. Lobingier has stated, it would have been easy for them to have changed the minds of the general reading public. I was present at Atlantic City, where Deaver and Senn had their discussion. Ochsner gave out this rest plan at St. Paul, and Ochsner has not varied at all. Mayo is between the two. These gentlemen are all striving for the same thing, but I will say that surgical authorities do not do what they say they do at medical meetings.

Dr. Harry M. Sherman, San Francisco.—Does Ochsner really show us what his position is? Ochsner only waits in these cases when he is in doubt.

Dr. C. R. Krone, Oakland.—I would like to mention a few points with regard to the physiology. As a fundamental cause for appendicitis we must consider the regular development of that organ, the cell and tissue development. The result is special function. There is no special function for the appendix.

Dr. George Hare, Fresno.—In regard to the conservative treatment, I have hoped that we will have the radical operation in all cases of appendicitis modified. We must have common sense in the decision of these cases. Another point with regard to the use of heat and cold in the rest treatment. I think we make a mistake in the use of either heat or cold. I believe that cold has the means of arresting peristalsis and inflammatory processes. We use it for the purpose of lessening the circulation and of arresting peristalsis. We use an ice bag until we get the deep effect of the cold, and then bring back the sensation of the skin by a hot bag, and we get the

result which we cannot get by continuous application of the ice bag.

Dr. W. F. B. Wakefield, San Francisco.—Recent experiments in Berkeley have shown that peristalsis can be stopped by the use of calcium chlorid. I think that is the basis of the Ochsner treatment.

Dr. E. Rixford, San Francisco.—Concerning my own paper, there is very little more to say except that inflammation of the appendices epiploicæ is far more common than ordinarily supposed. I have seen no reference to it in the literature. Obscure inflammatory trouble on the left side will be explained in this way. I would like to say a word in favor of the Ochsner treatment in cases of acute perforated appendices with rapid-spreading peritonitis. About Ochsner's statistics of only 4 per cent—Ochsner says that his mortality in acute perforated cases is only 4 per cent, but I find that he counts as a perforated appendix all sorts of cases that I have not considered in that class; that is, anything in which the material has gotten out of the appendix even with microscopical perforation. Also with Mayo. I think that if Ochsner would confine his statistics to those cases in which there is a progressive peritonitis that his mortality would be vastly higher than 4 per cent. Still I believe very strongly that where you have an advancing peritonitis, Ochsner's plan of rest is best. My own experience, which has been small, has been in favor of it. The difficulty is, in the individual case, to use that common sense which Dr. Barbat speaks of. The difficulty is whether the individual case is going on to rapid-spreading peritonitis or not. It depends upon many factors. One is the virulence of the germ. The pneumococcus is bad. A solution of the problem will depend upon the diagnosis and interpretation of the blood pressure, leukocytosis and distention and various other symptoms.

Dr. A. W. Morton, San Francisco.—With regard to the statistics of Dr. Deaver, he refers to all of his cases. If he figures up the acute cases you find he has 14 per cent of mortality. If you remember the discussion at Saratoga between Ochsner and Deaver you can readily see the animosity in that discussion. Deaver said, "Ochsner, in Chicago, is dealing with a different class of cases." In the same discussion at New Orleans, between Murphy and Ochsner, they had the same time. They are different as day and night. There are two forms of treatment. One of them invariably operates whenever he makes a diagnosis of appendicitis. He does not even use common sense. Common sense is what Ochsner's treatment is. He operates in all cases if there is doubt in the condition; if it has passed into that stage where there is general peritonitis, or just before you get to peritonitis, where you have an effusion; that is, a rupture of the appendix into the peritoneal cavity. If you keep down the peristalsis and keep the patient quiet it will always be walled off. That is the key of his treatment. As for gastric lavage, Dr. Ochsner does not claim to have originated that theory. He simply advocated it and brought it to the attention of the profession. There is one point in his treatment that you will find difficult; that is, feeding a patient. If you leave the patient at home without a trained nurse, some friend will give him beef tea or egg-nog, and break up the whole theory. You will not be able to carry out that treatment unless you remove the patient to a hospital or have a private nurse. As to the time for the operation, I like the theory of Mayo. He does not go as far as Ochsner does. Just as soon as the condition of the patient improves, or he believes that the abscess is walled off, he operates. It is an excellent thing to do at that time.

Dr. W. I. Terry, San Francisco.—Ochsner has certainly made his impression upon this country. Dr. Morton says one thing in his paper and another thing in his discussion. In the paper he says, give water

by mouth, and give enemas. In discussion he says give entire rest.

Dr. Van Zwalenburg, Riverside.—With regard to what Dr. Barbat said about pus in the peritoneal cavity, it has been disproven time and time again. Many patients have recovered. The Ochsner treatment has been discussed pretty thoroughly. With regard to Dr. Lobingier: In the first place Dr. Lobingier differs very widely from myself; but I think he evades the question. To be sure, appendicitis is an inflammation, but it is not always the same inflammation. Not anywhere will you find such rapid changes of the same nature as in the appendix. The changes in the blood vessels are important. In twenty-four hours you can see many changes. There is a sudden change in the circulation that has been noted by all pathologists. This change is a mechanical one. This theory explains that change. The doctor says that I bring out a curiosity to prove my theory. If you will operate during the first two days you will find many cases distended like this one. Abby proves that many cases are found fully distended. In all cases where I operated early, where the blood had not disappeared, the plug was still present and the appendix distended. It is not a curiosity.

ON THE ACTION OF SALINE PURGATIVES.†

By JOHN BRUCE MACCALLUM, University of California, Berkeley.

IT HAS been commonly believed that saline purgatives act locally upon the intestines. According to Schmiedeberg, Cushny and others they have a purgative action because they prevent the absorption of fluid from the intestines. Loeb has stated that these purgatives are identical with the salts which produce contact irritability, muscular twitchings and hypersensitiveness of the nervous system; and he suggested that they increase peristalsis by increasing the irritability of the nerves and muscles of the intestines.

The following experiments show that the saline purgatives barium chlorid, sodium citrate, sulphate, tartrate, etc., act as purgatives not only when introduced into the intestines, but also when injected subcutaneously or intravenously. The intravenous injection of $\frac{1}{2}$ cc. M/8 sodium citrate in the rabbit causes marked peristalsis within one minute; $\frac{1}{8}$ to $\frac{1}{4}$ cc., M/8 BaCl₂ causes strong peristaltic movements.

It was found that in addition to the increased peristalsis caused by the subcutaneous or intravenous administration of the saline purgatives, there is to be noted also a marked increase in the secretion of fluid in the intestines. A considerable quantity of clear yellow fluid collects in the loops of intestines which before the injection were practically empty. Careful measurements of this secretion were made, and it was found that, in a loop tied off from the rest of the intestine and drained by a canula placed at one end of the loop, the quantity secreted in a unit of time was greatly increased after the administration of one of the saline purgatives.

It was found that both the increased peristalsis and increased secretory activity in the intestines could be brought about by the local application of solutions of the saline purgatives to the peritoneal surfaces of the intestine; 1 cc. M/320 BaCl₂ is sufficient when applied in this way, to start strong peristaltic movements. With sodium citrate, sulphate, etc., the concentration must be greater.

†Synopsis of remarks accompanying the demonstration of a number of experiments on the action of saline purgatives to the Alumni Association of the Medical Department, University of California. The results of these experiments have been published as follows: American Journal of Physiology, Vol. X, 1903, p. 101; Vol. X, 1904, p. 259. University of California Publications, Physiology, Vol. I, 1903, p. 5; Vol. I, 1904, p. 81; Vol. I, 1904, p. 115.

A further series of experiments showed that a loop of intestine entirely removed from the body and placed in a solution of one of the saline purgatives at body temperature, not only exhibits characteristic peristaltic movements, but also secretes fluid into the lumen. This shows that both peristaltic movements and secretion in the intestine may take place in a loop which is entirely separated from the central nervous system and is not supplied with blood.

It was further shown that the peristaltic movements as well as the increased secretory activity caused by the saline purgatives can be inhibited by the administration of calcium or magnesium chlorid. In connection with this it was shown that the increased secretion of urine caused by diuretics can be inhibited by calcium chlorid. The normal flow of urine can be diminished by the same means. Calcium chlorid is thus an antidiuretic.

It is therefore certain, as shown by these experiments, that the saline purgatives do not act locally in the intestine, but exert their influence after they have been absorbed into the blood, since they act more quickly and in smaller doses when introduced into the blood. For this same reason they do not act because they are secreted into the intestine. It is also shown that the main factor in the production of fluid or semi-fluid feces is not as Schmiedeberg claimed, the prevention of the absorption of fluid from the intestine, but on the contrary, it is the direct secretion of fluid into the intestine. The increased peristalsis carries the softer feces of the upper intestine into the rectum, while the increased secretory activity increases the amount of fluid contained by the intestine. The theory of Liebig that the purgative solutions act on account of their high osmotic pressure is entirely untenable in the light of these and many other experiments.

The increase of the muscular and glandular activities by the saline purgatives and their suppression by calcium chlorid is entirely analogous to the production and suppression of twitchings in voluntary muscles described by Loeb.

A number of possibilities suggest themselves with regard to the therapeutic use of these facts. It seems quite possible that the use of subcutaneous purgatives might be resorted to in some cases. Further, cases of persistent diarrhoea, especially those of nervous origin, might be greatly benefited by the administration of calcium chlorid. For the same reason, with rectal infusions of saline solution, which in some cases cannot be retained until they are absorbed, it might be of service to add to the infusion a small quantity of calcium chlorid. This would inhibit the peristaltic activity of the rectum caused by the NaCl solution which would therefore be retained. In cases of polyuria, especially those of nervous origin, calcium chlorid might be of distinct benefit. Attention must be called to the extremely poisonous nature of barium chlorid, and the production of muscular twitchings by sodium citrate when given subcutaneously. In the administration of calcium chlorid, care should be taken that the flow of urine is not suppressed.

EPINEPHRIN; THE ACTIVE PRINCIPLE OF THE SUPRARENAL GLAND; A SECOND WORD.

By PHILIP MILLS JONES, M. D., San Francisco.

I have received an abstract of a paper by H. Pauly, date of March 31st, 1904, with the request that the essential statements be given space. Pauly objects to the formula suggested by Abel ($C_{10}H_{17}NO \cdot \frac{1}{2}H_2O$), and insists on the formula advocated by Takamine ($C_{10}H_{17}NO$). He says that "This formula (Abel's), together with the name 'Epinephrin Hydrate,' which designates the same, should be blotted out of the lit-

erature. The name 'Epinephrin,' however, should remain now as before for the basic substance obtained by treating adrenalin with concentrated sulphuric acid, or with dilute acids under pressure, and to this the formula $C_{10}H_{17}NO$ should be given." And again: "Thus there can be no doubt that not Abel and Crawford, but Takamine first obtained the active substance." This is the gist of Pauly's contention.

In the *Munchener Medizinische Wochenschrift* for June 7th, 1904, there is a still later article on the same subject, by Emil Abderhalden and Peter Bergell. They find, as the result of recent investigations, that the probable formula is as given by Takamine ($C_{10}H_{17}NO$), but they disagree in almost every other particular from the conclusions of Pauly. In their opinion, neither Abel nor Takamine has succeeded in isolating the pure crystalline active principle, for solutions of the product of either threw down a sediment and did not keep. The preparation made by Abel they found to be slightly more impure than that made by Pauly, and all other preparations were still less pure, with the exception of that made by Dr. Heinrich Byk, of Berlin. Of this latter they speak in the very highest terms, and say that it is the only absolutely pure preparation of the crystalline body that they have observed. It throws down no precipitate and keeps in solution. Experimentally, they find a 1 to 1,200 or 1,300 solution of this preparation equal in strength to a 1 to 1,000 solution of the ordinary commercial brands, adrenalin, suprarenin, etc. This preparation of Byk's bears the name "Epirenan," which is still another new one!

Now what is it all about? Why, about what we shall call the crystalline-active blood-pressure-raising-principle of the suprarenal gland. Obviously we cannot call it all that, and live. Nor can we call it adrenalin-adrenephrin-adrenamine-adrenol-adrin-caprenalin-hemisin-hemostatin-suprarenalin; life is too short. Abderhalden and Bergell use the name "Epinephrin," and do not demand that "it be blotted from the literature," as evidenced by the title of their paper, "Über das Epinephrin (Epirenan)."

Epinephrin seems to be a pretty good name for this particular thing. Some years ago Abel discovered that a chemical acting like this did exist, though he had not isolated it, and he named it epinephrin. That sort of thing has happened many, many times, in chemical work, and is well known and accepted. Helium was known to exist as such, and was named, long before any one isolated it as an element; so with radium. And so, too, so far as the evidence goes, with epinephrin.

We are not squabbling over the exact chemical formula, nor over the fact as to whether or not any one of the commercial brands is absolutely pure; there are enough good chemists in the world now working on those points to settle the matter in the course of time. If very great commercial interests were not involved there would be no question about the name to be applied to the thing—epinephrin would be generally accepted and used, for it is as good as any other. But the trouble lies in the fact that there are numerous brands of the thing, each with a different and a controlled name, and each owner of a name and a brand wants his particular name used; this is what we object to. Some words (registered as trade-marks, and thus owned) have been so grafted into the language that it is hopeless to try to get them out. But that is no reason why the number should be increased, and so far as the editor of this one poor, little journal can help it, the number will *not* be increased. Epinephrin (or more accurately, epinephrin hydrate) is a good name; it is understood by all chemists to mean just exactly the thing indicated—the crystalline active principle, or blood-pressure-raising element of the suprarenal gland, and until the majority of chemists cease from using it in that sense, that is what it will be taken to mean.

MEDICAL SOCIETY MEETINGS.

CANADIAN MEDICAL ASSOCIATION.

The annual meeting of the Association was held at Vancouver, August 23rd to 27th, 1904. The meeting was called to order on the morning of Tuesday, the 23rd, and Dr. W. J. McGuigan, Mayor of Vancouver, delivered the address of welcome. This was followed by an address on the same subject by Dr. J. C. Davie of Victoria. Both of these gentlemen welcomed the Association and the visitors to the western extremity of the country in the heartiest manner. The morning session closed with the Address in Medicine, delivered by Dr. R. E. McKechnie of Vancouver.

In the afternoon the following excellent papers were read: "Patent Medicines," by Dr. C. J. Fagan. Dr. Fagan dealt with the subject of nostrums in a very able manner. He was followed by Dr. D. Cruikshanks of Windsor, Ont., whose subject was "Therapeutic Hints from Bacteriology." The afternoon session closed with a paper from Mr. Mansfield, Fleet Surgeon, H. M. S. Grafton, on the subject of "New Color Test Apparatus."

Wednesday forenoon session was opened by the Address in Surgery, by Mr. Mayo Robson, London, England. His essay was well illustrated by lantern slides and was a most excellent and instructive effort. "Hernia of the Bladder Complicating Inguinal Hernia," by Dr. F. J. Sheperd, was the next paper. The other papers of the day were: "Movable Kidney," by Dr. Kenneth A. J. Mackenzie, Portland, Oregon; "Case Reports," by Dr. Robert H. Craig, Montreal, Quebec; report of a case of Hypertrophy of the Breast, by Dr. S. R. Jenkins, Charlottetown, P. E. I. In the evening Dr. S. J. Tunstall, Vancouver, delivered his address as President of the Association. It is abstracted as follows:

President's Address.*

I feel that my first duty to-night is to offer you my very hearty thanks for the honor you have conferred upon me in electing me President of the Association for the ensuing year.

The present occasion is no ordinary one. In the appointment of a president from among the members of the Association whose home and work lie in this far distant portion of the Dominion, and in our meeting here to-day at the doorway of the West, a new departure has been made.

To many of you, probably to most of you, the rapid progress and general development of this young province will come as a surprise. It does to most of our visitors from the older parts of the Dominion who know how recent has been the settlement of the West! And certainly looking around one, it does seem scarcely realizable that the site of this rapidly expanding city, of which its citizens are so justly proud, and this very spot on which this building stands, surrounded by so many comforts and refinements of modern life, was less than two decades ago a wild and almost impenetrable virgin forest, the haunts of the bear, the deer, and the primitive savage.

It is no idle boast then, if I say that in the West events move rapidly. Time is no sluggish here, and we see history fashioning itself before our eyes. The whole of this great province was in undisputed possession of savage aboriginals a half century ago. The closing years of the first half of the nineteenth century saw the first real settlement made on Vancouver Island at a place called Camosun in the native tongue, now Victoria the capital of the Province.

It is gratifying to our profession to know that it has been ably and honorably represented among those history makers in the persons of Drs. Helmcken and Tolmie, who were the first medical men to settle in the colony, about the middle of the last century. Both took prominent part in the earlier events of the Province. The former still remains among us; the

latter has gone to his rest. Prior to their advent the native medicine man had it all his own way.

There is a significance, not without interest to my mind, in the fact that this Association, representing as it does to-day in its various members the highest medical knowledge of this enlightened period of the world's history, should meet here in this new country where Shamanism, or the cult of the savage "Medicine Man," so recently prevailed and does to some extent still prevail. The old and the new order of things are thus brought into suggestive contrast and juxtaposition, and we are led naturally to reflect upon the stages and steps we have passed since the days when all medical knowledge was comprised in the superstitious and rude practices of our savage prototypes.

But it is not my intention to undertake such a task to-night, interesting and appropriate as it might under the circumstances be, although I cannot leave the subject without calling your attention briefly to a fact of which all of you may not be aware and which gives pertinence to my reference to the old-time Shaman, or Medicine man. We are all familiar with hypnotism, but there are few of us perhaps aware that in the employment of hypnotism as a therapeutic agent we are returning to primitive methods, to the practice of our savage prototypes. Those who have made special study of the practices and customs of savage races inform us that the primitive doctor, or "Medicine man," was not that self-conscious fraud and humbug, knowingly duping his credulous patients he is commonly thought to have been; but a person who had a real belief in his own powers and cures; and that these powers and cures were, when genuine, generally if not always attributable to hypnotism, especially to that phase of it known as suggestion. A state of hypnosis was induced in his patient by the monotonous droning of medicine song and the noise of his rattle, and when in this condition his attempt to extract the spirit of the disease from the patient's body, and his statement that he had presently accomplished it, acted suggestively upon the imagination of the patient and effected his cure.

But enough on this head. It is my intention rather to bespeak your attention to-night of a point or two which I, in common with many of the members of the profession, have very much at heart, and which I deem of such importance as to merit our most careful consideration and endorsement.

With regard to the Canadian Medical Protective Association, I would desire to urge upon members the strong claims this Association has upon the profession. I am among those who believe in the need of such an association and that it may be made a valuable means of assisting and protecting members of our profession from wrongful actions-at-law, to which we are all of us at all times liable; actions brought by irresponsible persons for the purpose of obtaining money under threats of injury to our professional character.

The objects of the association are such as all can subscribe to. It is not intended to defend or assist in defending unworthy members, or those who are actually guilty of malpractice, or who have brought discredit upon the profession. It aims rather to assist the worthy, those of its members who are wrongfully charged and whose character and reputation are placed at stake; and also to deter irresponsible and unscrupulous persons from bringing action against members of the profession for the purpose of spiting or injuring them, or of exacting a bribe for their silence; and it is only by uniting ourselves together in such a way as this association offers us that we can hope to secure the support of our brethren and become immune to many attacks which would otherwise be made on us.

And now I desire to touch upon the Dominion or Canadian Medical Act which was assented to in the Federal House in 1902. We are under a deep debt

* Abstract of the address delivered at the Vancouver meeting, Aug. 23d, 1904.

of gratitude to the members of the special committee, and especially to Dr. T. G. Roddick for his untiring efforts to get this measure placed upon the statutes of the country, and it is with great regret that I notice so much misapprehension as to the scope and powers of this bill still exists in certain quarters. It has been thought that it would encroach upon the rights and privileges of the different Provincial Medical Boards and interfere with their autonomy. It was, and is, not in any way intended to interfere with existing provincial rights or intrude upon prerogatives of Provincial Medical Boards. As an instance, in my own native Province, Quebec, our French-speaking brethren will have the right of examination in their own language.

Provincial registration and Provincial Boards will still continue to exist and each province will be at liberty to fix whatever standards it pleases for its own practitioners. They can, where they wish, continue as examining boards with power to grant Provincial Licenses *as they do now*, and in any case in their hands will be left all matters relating to taxation and professional discipline.

Briefly I would say that the main purpose of this Bill is to establish a Central Medical Council of Canada with power to examine candidates and grant licenses, the possession of which shall ensure to the holders thereof such a medical status as will enable them to practice not only in all parts of the Dominion, but in the United Kingdom as well, or indeed in any portion of His Majesty's Empire; in short, to do away with those mortifying disabilities under which a medical man trained in Canada now labours, and put him upon a footing of professional equality with his brethren in other parts of the Empire. This is assuredly a laudable and most desirable object, and one which, in my humble opinion, should call forth the best efforts of each one of us to bring about its accomplishment; and I sincerely trust that some concerted action will be taken in the matter before the meeting closes.

This brings me to my last point, "The Treatment of Inebriates." A conviction has been steadily growing in the minds of most medical men of late years that something should be done for the care and control of dipsomaniacs and inebriates in the form of founding establishments combining the main features of an hospital and an insane asylum, where drunkards could be legally confined under medical authority and treated in a systematic and enlightened manner. The practice hitherto of treating them as criminals, subject to a fine or short periods of confinement in the common prisons of the country, has been shown to be wholly unsatisfactory, and often productive of the greatest evil to themselves and those who may be dependent upon them.

There can be no doubt, I think, that the care and treatment of those unfortunate members of society is a question of the gravest and most vital importance, and should command the interest and attention of medical men as a subject which, coming well within their province, affects so seriously the general commonwealth.

A movement towards this end has already been taken in Ontario, and a Bill drafted, the principles of which have received the endorsement of the Toronto Medical Society and also of our own Association; but what we want is a Dominion Act affecting the whole country, and it would be the source of the greatest satisfaction to me if this meeting would take this question up seriously and nominate a Committee to draft a measure that could be submitted to the Federal authorities. This could be done either on the lines of the Ontario Bill or any others that might commend themselves.

Before closing my address, I wish to express to our visiting brethren my appreciation of the kindly feeling and interest which have actuated them in taking part in the deliberations of our National Association,

and to hope that their stay may be fruitful of pleasant reminiscences.

Wednesday's session was closed by the following papers: An Address in Gynecology (Lantern-slide Clinic), by Dr. E. C. Dudley, Chicago; "High Frequency Currents in Functional Diseases, Particularly in Functional Neuroses," by Dr. S. F. Wilson, Montreal, Quebec; "A Further Study of Neuroses as Seen in Orthopedic Practice," by Dr. B. E. McKenzie, Toronto, Canada.

The scientific session closed on Thursday morning, the papers of that day being as follows: "Tuberculous Peritonitis," by Dr. Chas. H. Mayo, Rochester, Minn.; "Meckel's Diverticulum, Report of Cases," by Dr. H. Howitt, Guelph, Ontario; "Results (after one year) of the Lorenz Reposition on Congenital Dislocation of the Hip—Radiograms," by Dr. C. W. Wilson, Montreal, Quebec; "Operative Treatment of Spina Bifida," by Dr. E. R. Secord, Brantford, Ontario.

It is unfortunate that the pressure on our columns this month is so great as not to permit of a more extended report of the meeting. It was a most excellent session, about the only criticism to be made being along the line of lack of much discussion. Papers of the sort read at these meetings are really worthy of plenty of discussion, and everything should be done to encourage this feature of medical society gatherings.

OREGON STATE MEDICAL ASSOCIATION,

Thirty-first Annual Meeting,

Portland, August 30th and 31st, 1904.

The House of Delegates met the day preceding (August 29th), and two members of the publication committee of the Medical Society of the State of California went up to Portland to attend this meeting of the delegates. They presented to that body the offer of the California Society to share, in equal representative control and ownership, the publications of the society. As the Oregon Association has but 220 members, and in the natural order of things cannot hope to very greatly increase this number, it cannot afford to publish either a volume of transactions or a journal, to say nothing of a register and directory. Hence the offer above mentioned. But the delegates, for some reason or reasons best known to themselves, did not see fit to report the matter to the association, and up to the present time have not officially advised the committee from California as to what action was taken.

The scientific sessions opened Tuesday morning with an address of welcome by the mayor of Portland, Mr. George H. Williams. His welcome was cordial, and his remarks both witty and to the point. He said, in part:

"Mr. Chairman and Gentlemen: I am pleased to meet so many distinguished representatives of the medical profession, and extend to them and each of them a cordial welcome to our city. We feel complimented by the meeting of the convention here, and are desirous to make your stay with us as enjoyable as we can.

"Some people say that doctors, preachers and lawyers are necessary evils; but the fact is that these professions are made necessary by the evils and ills that otherwise afflict society. I do not know what we should do without the doctors. The first thing we encounter when we come into this world is a doctor, and the last thing we see when we go out of the world is a doctor. Sometimes a preacher intervenes between the doctor and a sick man, but his prayers seldom change the effect of the doctor's medicines. Many wonderful discoveries have been made in the medical world within a comparatively recent period. Among these is the discovery that sickness is due generally to living organisms called germs, which are

supposed to exist in everything we eat or drink, and so much has been said of late about microbes, bacteria, bacilli and such things that it seems as though the only safe place for a man is in a septic tank, where, it is said, these voracious creatures devour each other and make the contents of a sewer as pure as the icicle that hangs from Dian's temple. Another of the novelties of modern times is the discovery of the appendix. It is surprising that never since man descended from a monkey has it been known that he had an appendix until within the last 25 years.

"The question has arisen, What is this appendix for? But it has not been answered, and will not be until it is incorporated by the civil service commission into the examination of an applicant for a position in the street-cleaning department.

"This case is reported in 'Taylor's Medical Jurisprudence': Plaintiff sued for assault and battery, and called as a witness a doctor who had examined him, who said: 'I found the plaintiff suffering from a severe contusion of the integuments under the left optic, with great extravasation of blood and ecchymosis in the surrounding cellular tissue, which was in tumefied state, with considerable abrasion of the cuticle.' 'You mean, I suppose,' said the judge, 'that the man had a black eye?' 'Yes,' answered the witness."

Following the address of the mayor, the treasurer presented her report, showing a balance on hand of \$566.26.

The first paper on the program was by Dr. W. J. May, Baker City, on **Notes of a Case of Cerebral Hemorrhage**. The case reported was of rather unusual interest. It occurred in a man 62 years of age, who was first seen on January 20th, 1900, at which time he showed evidence of cerebral pressure; there was no indication of any traumatism of the head, and only an unsatisfactory and fragmentary "history" could be compiled. He gave many names and places of residence; he hesitated in speech; he dragged his right foot, and had a shuffling gait; the sight was apparently good; secretions and sphincters normal. Later it was learned that there was a history of general good health up to the time of an accidental injury. The necessity for operation was evident, but as the identity of the man was not known, operation was not immediately performed. Later his identity was learned, and his relatives communicated with. It was learned that he had been thrown from a horse in November, 1899, and had been unconscious for several hours thereafter; on regaining consciousness he was apparently well, save for more or less headache. Permission could not be secured for operation until February 4th, at which time his condition was very bad. He was in complete coma; no corneal reflex; could not swallow; chronic contraction of the forearms and hands. A button was removed over the arm area of the left side, and the dura found to be tensely stretched; when punctured a stream of liquid spurted across the room. Great shock followed, and the opening was closed for a short time; later the wound was enlarged and the cavity cleaned out. Almost the entire space normally occupied by the left hemisphere was one large cavity. On the following day the patient was entirely rational, and asked where he was, and how he got there; only slight traces of paralysis could be noted. Recovery was rapid, and on the 18th he was discharged, apparently well, but was advised against any considerable exertion, excitement or indulgence in alcoholics. On April 6th he took too much whisky, and there was immediate return of the paralysis; he returned to the hospital, and in a few days was again apparently well, when once more he got drunk, with a return of the pressure symptoms. On May 15th a discharge appeared from the right ear, and on the 17th he died. The left hemisphere looked nearly normal, but there was an abscess in the right hemisphere near the lateral ventricle. The case was noteworthy for the following reasons: The

size of the depression or recession of the brain tissue; the passage of 78 days without symptoms; rapid brain expansion after the operation; an abscess remote from the location of the original trouble; the prompt and injurious effects of over-stimulation. The moral to be drawn is that it is never too late, while life lasts, to look for good results from operation under conditions of this sort.

Dr. S. E. Josephi opened the discussion, and dwelt especially upon the interesting data relative to cerebral localization. He thought it remarkable that with so great a lesion there was so little effect on sight and hearing. He said the mind deafness had been spoken of, but the probable mind blindness and word blindness had not been sufficiently accentuated. He considered immediate operation fully justified, in these cases, without waiting to gain the consent of the friends or relatives of the unknown patient.

Dr. May, in closing, said that mind and word blindness existed when the patient was first seen. He agreed that, in theory, immediate operation was justifiable, but thought that in practice the possibility of being sued, should an untoward result follow, was too great to make it possible for the surgeon to interfere without permission, save at the last extremity.

Clinical Observations on Blood Pressure and the Diagnosis of Abdominal Arterio-Sclerosis, by Albert Abrams, of San Francisco, was the next paper on the program, but as Dr. Abrams was not present, a synopsis of the paper was read by Dr. James F. Bell.

Dr. Woods Hutchinson opened the discussion on the subject, and stated that the vasomotor system was just coming into its own; it had been ignored for too long. It demands much and careful study. He considered many particular diseases, as tuberculosis, nephritis, etc., as but local manifestations of a condition of the heart and vasomotor system which permitted the special disease. He thought the term "vasomotor system" should be substituted for "heart," as the latter is but an expanded section of the former. The valves of the heart are of less importance than we have thought; it is the general condition of the whole vasomotor system which should demand our careful consideration. A high blood pressure generally means intoxication of some sort, and the cause of this should be looked for and corrected. Potassium iodid he had found very useful, and also extract of the thyroid gland, the latter serving as a most excellent eliminant.

Dr. Emmet Rixford, of San Francisco, expressed his belief in the views of the last speaker, and cited a case in an old man who had slight arterio-sclerosis; an attack of pneumonia, with very evident toxemia, was followed by excessively rapid development of the arterio-sclerosis. Some abscesses formed, and an examination of the pus disclosed almost pure cultures of the pneumococcus.

The next paper read was **On the General Usefulness and Adaptability of the Stimson Splint**, by Dr. George F. Wilson, Portland. He described the splint, which consists of a strip of plaster gauze bandage, laid to and fro until a sufficient thickness is secured. These strips may be laid along the long bone and held firm by a circumscribing bandage, securing immobility while at the same time permitting inspection of the seat of injury. He considered that this form of splint possessed many advantages over the ordinary form of plaster dressing. It may be applied to all long bones, and is well adapted for use at the elbow, where a half turn makes it conform to the flexed joint. A new splint of this sort can very quickly and readily be applied. With the ordinary form of plaster dressing one cannot tell whether there is over-riding of the fragments; with this form the region of the fracture is always in sight.

Dr. James R. Yokum, Tacoma, had not seen or used this form of dressing. He said he would try it, especially in cases of compound or comminuted frac-

ture, except where there was much swelling; in such cases one could not get pressure. He has been accustomed to use the plaster dressing with an embedded wire saw, and when the swelling has decreased, cut out a piece of the dressing and again approximate it, thus bringing pressure to bear.

Dr. Thomas W. Huntington, San Francisco, thought it but a case of an old story in a new form. For generations physicians have been discussing various forms of splints, and doubtless will continue to treat of the subject. The reason is that there is no perfect splint. Present demands upon the surgeon are greater than ever, owing to the discovery of X-ray examinations. Be the result of setting a fracture apparently never so good, a skiagram may show poor approximation. Each fracture is a law unto itself, and if one can apply any single broad principle, it is that adjustment which depends for maintenance upon a splint alone, is generally unsatisfactory. Fractures of the lower extremity should be treated with extension as well as with splints, even when it may not, apparently, be necessary. In the case of compound fractures, one should treat the wound first and the fracture second; after the first five or six days there is, relatively, little danger of infection, and one may then carefully adjust the fragments and apply a plaster dressing. Surgeons will always differ as to the method of handling such cases; results alone count.

Dr. Harry M. Sherman, San Francisco, questioned the mechanical sufficiency of this form of splint, for the reason that plaster of Paris does not possess a great deal of strength, and that a dressing of this material to give strength must be in the form of a cylinder. He could not see that it had any advantage over the old Bavarian splint. If the wound is carefully and aseptically treated, the fragments approximated, the wound closed and aseptically dressed, a plaster bandage may be applied with safety; there seems to be more danger in applying a plaster dressing with the wound open than in the operation itself.

Dr. R. J. Pilkington, Astoria, thought the entire strength depended upon how the splint was made. Simply folding the plaster bandage and wetting it will not suffice; the folded and wet strips must be rubbed hard so as to make a dense mass. In Stimson's clinic the limb is first covered with vaselin; the splint is then applied and allowed to harden; it is then removed, cotton placed inside, and a few turns of starch bandage applied to keep the plaster from crumbling and irritating the skin.

Dr. Wilson, in closing, said he thought one could be more accurate in his work and sure of his result by using this form of dressing, permitting the site of injury to be seen and felt, when necessary, than in any other way. In regard to the strength of this sort of splint, he had found no such lack of it as suggested by Dr. Sherman. He showed an old splint that had been worn for some time and was still quite strong enough to give the necessary support. Where unusual strength is desired, a narrow, thin strip of wood may be included in the folds of bandage. The wound is prepared and carefully covered with aseptic dressings while the splints are being applied, so the danger indicated by Dr. Huntington is removed.

Notes on the Management of Normal Labor, by Dr. George E. Houck, Roseberg, was the next paper. The paper was merely a resume of well-known general principles, and possessed nothing of particular interest. The use and abuse of chloroform in obstetrical practice was the main feature of the discussion.

Dr. W. F. Amos, Portland, suggested cutting away the hairs from the vulva, and pinning the sheet to the blankets or comforters so that all the superior bed clothing could be removed at once and by a single act. He thought the best way to administer chloroform was to soak some cotton in an ordinary tumbler and allow the patient to administer it to herself.

Dr. E. B. Estes, Astoria, thought the preparations

for a confinement should begin about seven days before it is expected. Chloroform should always be given, but at the right time.

Dr. J. F. Bell, Portland, thought the danger of chloroform should not be ignored. He thought it had a decided tendency to produce postpartum hemorrhage, especially when too much was used.

Dr. J. T. Walls, Portland, thought the use of chloroform in the early stages of labor not infrequently resulted in the child being still-born.

Dr. Jessie M. McGavin, Portland, cited a case of bad effect from too much chloroform.

Dr. E. B. Pickel, Medford, deplored the making of general rules; each case should be considered by itself. In general, nature is given too little chance, and too much interference is indulged in.

Dr. Houck, in closing the discussion, said that he had never seen the slightest trouble arising from the use of an anesthetic; it might be given for 48 hours, if necessary. Some of the objections raised in this discussion should have been done away with twenty-five years ago.

Tuesday, Afternoon Session.—Cancer of the Large Bowel, by Dr. Charles H. Mayo, Rochester, Minn. He gave a brief historical resume and description of the various operations and technic. Exploratory operation is very often necessary to determine diagnosis or desirability of operation. Colostomy may be necessary to take care of the feces, and puncture of the gut to relieve gas pressure. To avoid a second and perhaps dangerous operation, the lumen of the gut may be closed after colostomy by introducing one leg of a forceps or clamp into each side of the gut and slowly increasing the pressure over a period of from three to five days. The three desiderata are permanent cure, low mortality, and control of the anus. He recited various operations for preserving control of the anus, in operations low down, all of them having objections. In 15% of operations the patient retains a controllable anus. The best results seem to follow combined high abdominal and perineal operation. A horseshoe-shaped incision is made in the perineum, the lower sigmoid is loosened with a blunt dissector, and the bowel is ligated two inches above the cancer. One end of the gut is turned in and covered while the other end is being attended to. The so-called gridiron incision is made and the bowel drawn out.

Dr. Andrew C. Smith, Portland, opened the discussion, and paid a high compliment to the position occupied in surgery by the Mayo brothers. As one-half of all cases of cancer occur in the alimentary tract, it behooves us always to have an eye to that possibility. As the chances are better for recovery when the disease is diagnosed early, we should bend every effort toward making early diagnosis. The symptoms are very plain: tumor, ulceration and stenosis, but the difficulty is in observing the symptoms, until late, when the disease is far advanced and they are forced upon one. Increasing constipation, as indicating stenosis, should attract our attention, as it is one of the earliest signs. Having concluded that cancer exists, its definite location must be determined, and an exploratory operation is often necessary.

Dr. R. C. Coffey, Portland, thought the progress of modern surgery so rapid that all text-books were out of date; statistics are varying from month to month, as more cases are recorded and greater skill in operating acquired. As cancer of the bowel is of slow growth, an operation may greatly prolong life, even if no cure results. He considered the method suggested, of closing the bowel after colostomy without subjecting the patient to another operation, of the highest importance. He showed a schematic drawing of the region of the rectum which indicated the site of a cancer removed from a patient under his charge some two years ago. The patient was still apparently perfectly well. He asked Dr. Mayo what he would have done in the circumstances cited.

Dr. Emmet Rixford, San Francisco, said that the Mayo brothers were particularly fortunate in the amount of material at their disposal and the number of patients coming under their observation. Consequently their utterances are more authoritative than those of most surgeons, who can at best report on but a few or a single case. We learn by our mistakes, and sometimes it is incredibly easy to make a mistake. He cited the case of a patient in whom he suspected cancer. An exploratory incision was made, but no cancer found. Later an annular carcinoma was found, so small as to be hardly noticeable, yet large enough, by constriction, to produce marked obstruction. This form of cancer is to be looked for most carefully, as it will often give no palpable tumor. He thought the combined perineal and abdominal operation an excellent one and one which would probably be found to be much easier on the patient.

Dr. Oviatt, Wisconsin, said that, when a young man, he had been taught to look Eastward for all wisdom; now the geographical lines are wiped off the map, and indeed many men look to the Westward rather than to the Eastward. He urged careful study of the peritoneum. In health the peritoneum can deal very effectively with a large amount of work placed upon it; not so when it is diseased or below par. If the abdomen contains red liquid and the peritoneum is dark and not glistening, one should not count upon it to heal well or to take care of any infectious material. He referred to a case in his own practice where the patient showed no symptoms save those which might be attributed to hemorrhoids. Mayo operated, much after the manner described in the paper. The patient is still alive and apparently well.

Dr. Kenneth A. J. Mackenzie, Portland, said that he had operated on some seven or eight patients for this disease, but thought that, in the main, the results were unsatisfactory. He considered the combined operation described as of the first importance and a great step in advance. Exploration should be carefully made, for glandular involvement may be great or small, and one cannot tell this from the clinical symptoms. The results would be better if the patients could be operated upon sooner. Often the earliest symptom is a watery diarrhea.

Dr. Mayo, in closing, said that he felt very deeply the words of too flattering praise that had been spoken. In his opinion death directly from cancer very rarely occurred; death resulted from secondary cause, due to the presence of cancer. Consequently, if the patient is operated upon sufficiently early, and even if the cancer returns elsewhere or at the same place, a long period of comparative health may be secured. It has been suggested that bacteria developing in the colon have some influence on the cause of death; birds, having no colon, usually live a long time. There is no objection to removing large amounts of the colon, as patients stand it well.

Diagnosis of the Inflammatory Lesions of the Upper Half of the Abdomen was read by Dr. D. H. Niles, Salt Lake City. He said that some of the more dangerous processes in this region could be greatly helped by early interference, and consequently we should be stimulated to greater precision and accuracy in our diagnosis. He referred particularly to several directions for increased effort. First—The mental attitude of the physician. He should form broad general pictures, and should consider a diagnosis as made with probable certainty when other conditions had been excluded. Second—The history should be carefully considered. Almost invariably we have a history of ulcer preceding cancer of the stomach. Third—Pain, its significance, varieties and location may be broadly divided. Fourth—Dilatation of the stomach is an indication of some abdominal process of importance, and is not due to simple "atonic dyspepsia." Fifth—Tumors or masses in or about the pylorus are not always nor necessarily

cancerous. They should be carefully observed, and all other facts considered in connection therewith. Diagnosis of malignancy in this region is often very difficult to make. Sixth—Laboratory work (test breakfast, etc.) is of but little importance save in connection with all the symptoms and clinical evidence. Seventh—Systemic infection may accompany many abdominal lesions, and these should not be overlooked as suspicious under such circumstances.

Dr. W. H. Byrd, Salem, thought there was little if anything in the paper that could be considered open to controversy, though all might not agree with the author in all of his conclusions. In the lower half of the abdomen the cavities are more numerous and the opportunities for diagnosis much better than in the upper half. He cited the case of a man of 65 who exhibited all the classic symptoms of cancer of the pylorus. After death it was found that he had atrophy of the pancreas, and no other lesion. It illustrated the difficulty of diagnosis without exploratory incision.

Dr. Thomas Parker, Toledo, suggested some complications that might easily confuse one's diagnosis in the region under discussion.

Dr. Charles Mayo, Rochester, Minn., said that he thought our progress in surgery was largely due to the study of living pathology; postmortem pathology is very unreliable. Death may result from some disease other than that under observation, and the conditions noted at autopsy be very misleading. In a person of 45 or 50 there may be symptoms of cancer but no tumor; a few months later the tumor may be palpable, but by that time the disease may be inoperable. It is not easy, if indeed possible, to differentiate an ulcer of the stomach with adhesions, from a cancer. The hand can cover the region of the abdomen which is the seat of most grave lesions—the stomach, pancreas, gall-bladder, etc.,—and to differentiate them in this small area is most difficult, without exploratory incision. We have depended too much on laboratory pathology and not enough on living and clinical pathology.

Dr. Niles, in closing, said that he had nothing to add to the remarks which had been made.

Dr. Thomas W. Huntington, San Francisco, then read a paper on **Posterior Gastro-Enterostomy for Non-Malignant Conditions of the Stomach**. (This paper will appear later.—Ed.)

Dr. J. B. Eagleson, Seattle, who was to have opened the discussion, requested Dr. Mayo to take his place and discuss the paper.

Dr. Charles Mayo, Rochester, Minn., said that the number of cases reported was rather too small to indicate any general conclusions. In general, the experience was about that of himself. The anterior operation had been abandoned. Eventually, and after rest following the operation—it may be one year or fifteen years—the pylorus gets better, opens, and the food seeks its natural outlet. He considered the best operation, if it could be made, the Finney operation. He then reviewed the operation as now generally performed (as reported by Dr. Huntington). He generally added an entero-enterostomy during the operation, when possible, and generally found it possible. It may be done in a few moments by means of the Murphy button, one side of which is inserted in either leg of the gut, the gut punctured with a knife, and the halves of the button then adjusted. This cannot be done if the abdominal viscera are not well and healthy, for the button will tear through and the tissues have lost their ability to repair. If there is fluid in the abdomen and the peritoneum is not healthy, a McGraw ligature may be used in a little pocket made for the purpose, and union thus obtained.

Dr. R. C. Coffey, Portland, thought the operation indicated had its place in surgery, and would live, but that it had undoubtedly been abused. Dr. Niles' remarks on the importance of diagnosis were here

very apropos, and should not be forgotten. One should be sure of his diagnosis, and should operate only where the operation is clearly indicated. He said that he had discarded the Murphy button for the Lambert suture, which he regarded as the only reasonable method of doing this operation. The suggestion of Mayo, to do the second operation at the same time, by means of the Murphy button, one side in either leg of the gut, puncture the gut with a knife and then unite, he considered excellent. It certainly could be done in not more than two minutes. He asked Dr. Mayo what would happen if the button went up instead of down.

Dr. Mayo said that the button does not go up, for to do so it would have to travel against the direction of the peristaltic action for a distance of at least four inches. The gut is sutured to the stomach to prevent the passage of a loop of intestine between the two.

Dr. Andrew C. Smith, Portland, rose in the defense of the Murphy button, which he considered much less dangerous in the hands of the average operator. He thought with it there was less danger of the vicious circle; had never heard of this occurring when the button was used. He said he personally preferred the Murphy button and the Finney operation.

Dr. Huntington, in closing, said that he had no personal objection to the Murphy button, but that he did not use it, as, in his hands, the Lambert suture was more satisfactory. He deplored the fact that men probably reported their successes and not their failures; their good and not their bad results. Of late much has been heard from the physician as to "conservatism"; but it is conservatism that does not conserve life. The mortality from conditions as reported, under the physician's treatment, is quite as heavy as it is following operative interference.

A Discussion on Some of the Newer Aids in Surgical Diagnosis, by Dr. Park Weed Willis, Seattle, was the next paper read. The hemoglobin should be determined before an operation; if it is 25%, an operation would be dangerous. It should be at least 50%. The coagulability of the blood should be determined; if more than six minutes pass before the blood coagulates, the operation should not be undertaken. The leukocyte count is very instructive, and in many conditions is of the greatest importance. This, as is now well recognized, is particularly true in appendicitis. The blood-pressure may give valuable information, especially in disease or injury of the brain. The X-rays are now of universally recognized value, but they must be understood. They give a shadow picture that may be distorted and misleading; the relations of plate, bone and tube must be known in order to properly interpret the radiogram. The tendency to become less acute through the use of mechanical aids to diagnosis is no argument against their use.

Dr. Harry M. Sherman, San Francisco, said that there could be no discussion as to the value of hemoglobin determination and a leukocyte count. The only trouble with the hemoglobin test is in the man and the instrument making it; the personal error may be very large on account of the inability of the man making the test to prepare the solutions always of the same color. In regard to the blood-pressure, he did not hold with the author, who he considered rather optimistic as to its value. The blood-pressure may be an exceedingly deceptive condition, in illustration of which he cited some instances where this had occurred in his own practice. He referred to the work done in the Boston City and the Massachusetts General Hospitals, where the results were very unsatisfactory. Subsequent work may show it to have a relative value when taken in connection with other conditions. The X-ray shadows should also be taken only with a full understanding of other factors. One should always see the region to be observed from two directions, and in both cases the relation of tube to

part examined should not be ignored. He cited a case where the radiogram showed, apparently, congenital dislocation of the hip with rotation forward. Later it was learned that what had seemed to be the head of the bone was really an abscess.

Wednesday, August 31st.—The morning session opened with a paper on **Milk as a Diet for Children**, by Dr. G. S. Hicks, Tacoma. Milk is undoubtedly the very best food for infants, and though there have been many attempts at modification of cow's milk to make it correspond with mother's milk, no fixed formula can be always applied. He referred to the annoying interference from learned old women who recommend to the mother some one or more of the hundreds of nauseous "infant foods" of more or less unknown composition, all of which are dead foods. The trouble is that one tries to make impure cow's milk take the place of pure mother's milk and entirely forgets the contaminated condition of the average cow's milk. Milk once contaminated is forever unclean, and cannot be made a fit food for infants; anything added to it, or if it is heated, to destroy the bacterial contents, the value of the milk is destroyed. Fresh pure milk is an almost perfect emulsion, and is readily digested; impure milk has lost its healthy qualities, and they cannot be restored. He referred to the various forms of bacterial life commonly found in milk and to their probable origin. A few may gain entrance from the udder of the cow, but most are introduced in handling, or get in from unclean surroundings. He said that milk passed through the separator and the plasma removed, to which cream was subsequently added, was supposed to be pure and a good food. In Tacoma they had had an opportunity of studying this, and he could report the absolute falsity of such a belief. The milk company in that city did just the thing mentioned, and a number of babies fed on the separated milk, plus cream, got sick and had a good deal of disturbance with their alimentary tracts. When placed once more on unseparated milk, they got well. In the stools of infants fed on the separated milk, from which the plasma had been removed, small lumps, rather hard and somewhat elastic, appeared. Analysis of these showed them to consist of fat 37%, casein 54%, nitrogenous material 8.6%, and ash 8%; this corresponds almost exactly to the analysis of cheese. The babies had been turned into cheese manufactories. The plasma is evidently an essential element of milk to be used as food. Some of this plasma was added to cottage cheese, and it dissolved the cheese. The value of milk as a food is destroyed if it be cooked. Mice fed on cooked milk died at the end of 30 to 40 days, though apparently eating well and not poorly nourished. Apparently there are certain important enzymes in the live milk that are necessary, and cooking destroys them. This is one great objection to an prepared infant foods; they are dead foods and not living foods.

Dr. Woods Hutchinson, Portland, said that nothing could make impure milk fit to be used as a food, nor restore the bloom of innocence to milk that had once become contaminated. The dairyman will continue to supply unclean and impure milk just so long as he is permitted to do so. Everything done to milk or added to it injures it; it is at its very best when it is fresh, clean and pure. If put through a separator the emulsion of the butter fat is destroyed and a butter-fat mass results, which is far less digestible than the natural emulsion. The quality of milk supplied might be improved by placing a premium on clean milk. The efforts of the Oregon Board of Health had resulted in very greatly improving the output of certain dairies working in co-operation with it. The bacterial content had been greatly reduced; was never more than 25,000, and in one specimen recently examined was as low as 1,700.

Dr. Tansbury said that he could but emphasize all that had been said. He called attention, however, to the great variation in the total solids which good

normal milk may contain. Taken from different dairies this may vary from 9 to 13%. There is also great variation in the fat content of both cow's and mother's milk. Mother's milk may vary from 2 to 4.5% fat; cow's milk varies from 2 to 6.5% fat. It is evident that no fixed rule for modification can be safely employed. He said that milk was naturally acid, and that it would not coagulate in the presence of an alkali, nor would it readily digest if alkaline. It may be a good emulsion in the udder, but it is not after being drawn from the udder.

Dr. George H. Evans, San Francisco, said that while the subject of impure milk was an old one, it was certainly the most important, from the standpoint of infant feeding. He thought the problems presented in the milk question had been well brought out by the author. He referred to an epidemic of gastro-enteritis occurring in San Francisco during the winter months. Investigation disclosed the fact that even in the cold winter weather prevailing the milk as used contained 223,000 bacteria to the cc.; an amount far in excess of any safe limit. Investigation of the dairies showed them to be, without exception, absolutely and unspeakably filthy. Some improvement has taken place since then, but there remains plenty of room for further improvement. He described some of the actual conditions noted during this investigation, and called attention to the necessity for medical men to look after not only the cleanliness of dairies, but their general arrangements with regard to location, drainage, water supply, etc. He thought no amount of legislation would be of avail; a premium must be placed upon good milk, and dairymen encouraged by physicians to produce it.

Dr. Nelson, Tacoma (state veterinarian), said that the State Dairy and Food Commissioner was supposed to look after these things and see that they were kept right. The conditions are well recognized, but the medical men, who ought to insist upon clean milk, did nothing. They are content to receive into their own houses and consume milk that they must know to be impure and unfit for consumption. Only the doctor can reach the mother who feeds her child on impure milk, and it is the doctors who must exert the necessary influence to bring about a change. For years the veterinarian has known what the conditions are, but he can do nothing without the active aid of the doctor. It is easy to teach the dairyman, but that will do no good until the public is taught to demand clean milk, and this the public will not do so long as the doctors themselves do not demand it. Doctors should learn themselves and then teach the public that pure milk is a necessity, and they must first begin the teaching by demanding it themselves. They must also recognize and teach the fact that it is not good, sound business principle to sell for eight cents what it costs ten or twelve cents a quart to produce. It is quite possible to produce and sell pure milk, but not at the price which most people are in the habit of paying.

Dr. Hicks, in closing, said that we all know that cow's milk varies greatly from mother's milk, but we must do the best we can with what we have, and cow's milk is the next best thing to mother's milk. The thing is to get pure cow's milk, and do just as little to it as possible. Doctors must demand for themselves and for the hospitals under their control good, pure milk, and then they will get it. The public cannot be expected to ask for something better than the doctors are willing to accept. Not until the medical men demand that they themselves be supplied with pure milk can they expect to make much impression upon the education of the public toward the same end.

The president then announced the appointment of the Oregon executive committee to arrange for the **A. M. A. meeting in July next**. The committee is as follows: Kenneth A. J. Mackenzie, chairman; Andrew

C. Smith, George F. Wilson, William Jones, E. F. Tucker, A. J. Giesy and W. H. Coe. Remarks on the subject of the A. M. A. meeting were made by the president and by Dr. Mackenzie, who stated that it would be necessary to raise \$20,000 to \$25,000 to properly entertain the association, and that liberal contributions were expected from all Oregon physicians. Not \$10 or \$20 contributions, but larger sums. It should be remembered that to go east and attend the meeting would cost at least a few hundred dollars, and now the opportunity was presented of attending the meeting at home, a reasonable percentage of what it would cost to go away for the meeting should be contributed. He said he had a line of \$500 subscriptions promised, and wanted some more; the success of the Lewis and Clark Fair largely depended upon whether Portland could show to the country her ability to attend to the numerous visitors who would come to this meeting.

Dr. Eagleson, of Washington, offered all the assistance desired from that state.

Dr. Harry M. Sherman, of California, made the same proffer for California.

Dr. W. F. Amos, Portland, moved a rising vote of thanks to all those states which had assisted Portland to secure the A. M. A. meeting. As California was not included in the motion, Dr. William Jones, Portland, moved a rising vote of thanks to California for the tender of assistance.

Report on Cases of Tuberculous Peritonitis, by Kenneth A. J. Mackenzie, was then read. The cases reported had occurred in persons generally between the ages of 20 and 30; only one was noted in an individual under 15. A number of them were in Japanese, and they seemed to respond to operation remarkably well, so far as it had been possible to observe them. He discussed the different forms which the lesions might take, caseous, ulcerating, etc., and said the tubercular masses might be small and numerous, or very large. Ulcerating areas were dangerous in his opinion. These various types seem to be due to various changes that take place in the tubercle, for some cure or causes not well known. He thought tuberculous peritonitis more common in the Oriental than in the Caucasian, though tuberculosis of the lungs did not seem to be more common. In three years he had observed 11 cases of tuberculous peritonitis in Japanese; 9 of these patients had been operated upon, and of these 6 showed no symptoms of the disease. He referred to the medical treatment of the disease, and reported a case in which excellent results had followed inunctions of iodoform ointment to the abdomen, and later the ingestion of $\frac{1}{4}$ grain in codliver oil, daily. He referred to one case in which the X-rays had been used to quiet the pain. They were successful in that, and the patient's condition seemed to improve under their administration. The patient has had in all 75 exposures, and is very nearly well; an occasional exposure is made, but treatments are no longer regular. One should not always operate upon these patients, as the medical treatment suggested may be efficacious, and should be tried. In future he thought he would give more attention to this side of the treatment, and operate only when it failed of accomplishing the results desired, or where an operation was distinctly indicated.

Dr. Emmet Rixford, San Francisco, said that he was especially interested in the advice against surgical interference. He intended to make greater use of iodoform in the future, though he had not had a large experience with it. He reported a resume of his experience in caring for 7 patients with this disease. Three were children under 4 years of age. He considered the results of operative interference were not such as to brag about.

Dr. Bean, Tacoma, briefly reported his experience with six cases of the disease. Where there was a temperature of 101° he did not regard an operation with any expectancy.

Dr. D. H. Niles, Salt Lake, suggested that we were dealing with a condition about which we knew not a great deal, and that our treatment was based upon clinical experience and not upon any well-recognized rules. We should not be guided by clinical experience alone, but should seek constantly for further knowledge. The general condition and the cause of the local disease should be considered. Is the cause in the abdomen? Is the disease active? What is its nature? These are questions that we should try to answer. As a rule, the abdomen is the site of a low-grade and slow developing inflammation. The peritoneum is sluggish, and can help us but little. If we can change the character of the inflammation, and somewhat stimulate the peritoneum, we may get a successful result. The character of the inflammation may be changed in various ways—operation, irrigation, etc. Whatever is done should be done with the least possible traumatism to the peritoneum, for it is from this viscous that we must get help.

Dr. J. B. Eagleson, Seattle, said that he had seen a number of cases in the Japanese race. Many seem to get well even when presenting a considerable amount of involvement. He referred to Mayo's suggestion to look for the point of infection, and suspect the appendix and the fallopian tubes. We ought to find it more often than we do, and we ought to use the X-rays more often than we do. He suggested the injection of a small amount of iodoform into the abdomen.

Dr. Harry M. Sherman, San Francisco, said the bacillus of tuberculosis is a non-motile bacillus, and the current in the abdomen is from the peritoneum; so how can the bacilli get in as suggested by the author? He thought that not uncommonly it might be due to the breaking down of some retroperitoneal glands. He was very skeptical of the value of iodoform, but thought that, on the whole, the medical treatment of the disease was rather better than the surgical treatment.

Dr. R. C. Coffey, Portland, referred to the remarks that had been made as to seeking out the cause, or point of infection, and agreed with previous speakers. He did not believe that any fixed rule, either to operate or not to operate, could be applied. Everything suggested should be tried, under proper circumstances, and operation would be found successful in some cases.

Dr. Andrew C. Smith, Portland, testified to the value of X-ray treatment, and thought it was probably the very best of all. He considered that one should never operate unless there were indications that drainage was needed. One can always operate under a local anesthetic, and when an operation is done, drainage should always follow, and the patient be subjected to X-ray exposures as well. Tubercular glands should not be removed unless absolutely necessary; main reliance should be placed upon X-ray exposures.

Dr. Frank Cauthorn said that there seemed to be a great deal of difference of opinion. One man never drained and another said it should always be done; one regarded operation as the best treatment, and another thought it the worst. There seemed to be a general lack of unanimity on any single point. X-ray exposure seemed to him to offer the most promising results. The thing to secure was a change in the grade of inflammation.

A motion was then introduced making the special order of business at 3 o'clock in the afternoon, the election of officers. The motion prevailed.

Dr. Maekenzie then closed the discussion. He said there was not so much real as apparent disagreement. As to drainage, one always drained when it was indicated. He endorsed the remarks of Dr. Niles in regard to the peritoneum. The reason for improvement following operation is not understood. He thought Dr. Rixford's high mortality due to the unusual number of children upon whom he had operated. In his own opinion, practically all children die,

whether operated upon or not. He concurred in the probable value of the X-ray.

At the afternoon session Dr. James T. Watkins, San Francisco, demonstrated the **Wullstein apparatus for the treatment of scoliosis**. (See page 316.) A number of questions were asked Dr. Watkins, to which he replied. No points aside from the facts presented in the paper by Dr. Watkins were developed in the discussion.

Dr. Harry M. Sherman read a paper on **Congenital Dislocation of the Hip**, which will appear later in the JOURNAL.

Dr. S. C. Baldwin, Salt Lake, said that he quite agreed with Dr. Sherman's conclusions. He did not think so many years ago, but he had come to the belief that by following Sherman's advice one got the best results. He had performed a number of the Lorenz operations, and thought the results good. He saw Sherman's radiograms showing the head of the femur not in the acetabulum; took radiograms of the patients upon whom he had operated, and found precisely the same condition. Later he saw Hoffa operate, and liked his operation less than that of Lorenz. He had concluded that the best results and least damage were obtained by the operation as described by Sherman.

Dr. James T. Watkins, San Francisco, said that he occupied a rather unique position, as he had been for some nine months assistant to Dr. Lorenz, and later had been assistant to Dr. Sherman. From his observations, however, he could not but coincide with what Sherman had said, and if his own son had dislocation he would ask Sherman to operate by the open method. He referred to the old form of open operation, as performed by Hoffa, where the wound was left open and stuffed with gauze; suppuration always resulted, and not a few deaths occurred, to say nothing of the generally resulting ankylosis. Lorenz believes that he gets a good functional result even when the head of the bone is not placed in the acetabulum.

Dr. Sherman, in closing, said that sooner or later all would learn the same lesson; the camel will not go through the needle's eye. One cannot place the head of the femur in the acetabulum when the capsule is so constricted that the head cannot pass the constriction. In 42 hips examined by him, the hymen of the capsule was so small as not to permit the passage of the finger tip, let alone the head of the femur. The wound of the open operation is made aseptically, and is closed and dressed in the same manner, and suppuration does not follow.

The hour of three having been reached, the election of officers was taken up, and the following gentlemen elected:

President, George F. Wilson, Portland; first vice-president, Mae H. Cardwell, Portland; second vice-president, W. H. Byrd, Salem; third vice-president, W. L. Wood, Portland; secretary, L. H. Hamilton, Portland; treasurer, Jessie McGavin, Portland; counsellors, W. H. Coe and R. C. Coffey, Portland.

Following the election of officers, Dr. Dudley, Chicago, delivered his lantern-slide clinic.

Fractures of the Elbow, by Dr. Emmet Rixford, San Francisco, was the closing feature of the meeting. Dr. Rixford did not read a paper, but demonstrated his points upon the bones of the arm and exhibited a number of radiograms illustrating his various statements.

In the evening of Wednesday, the physicians of Portland gave a smoker to the members of the association and guests.

Dr. Jno. C. King, of Banning, has an article on the State Board of Medical Examiners in the September number of the *Southern California Practitioner*. Dr. King gives his personal impressions of the various members of the board, and of the last examination. In his opinion the law is administered honestly and without fear or favor.

COUNTY SOCIETIES.**Alameda County.**

The regular meeting for the month was held on September 13th, Dr. Maher, the president, in the chair, and thirty-two members attending. Dr. E. H. Woolsey entertained the society by reading a paper entitled "Ancient and Modern Japanese Medicine." The doctor has lately returned from the Orient, where he spent some time in Japan. While there he visited the medical institutions and the noted medical men of that country. The paper was interesting and instructive and was listened to with a great deal of pleasure by those present.

J. M. SHAW,

A. S. KELLY, Publication Committee.

Marin County.

The regular meeting for the month was held on Saturday, September 3rd, at San Rafael. The following preamble and resolution were introduced, discussed at some length by the members present, and unanimously passed. The members of the society seem to be a unit in agreement upon the question involved:

Whereas, There are in our midst a number of societies which are known as "contract societies," that is, societies which make an agreement with a physician whereby he treats members of such societies, and in some instances the families of such members, at contract rates; and

Whereas, The sentiment of the medical profession is opposed to the policy of such contracts, as unethical and lowering to the dignity of the medical profession; therefore be it

Resolved, That no member of the Marin County Medical Society will be permitted to make contracts with such societies; and further, that a physician in the employ of such societies is not eligible for membership in the Marin County Medical Society.

W. F. JONES, President.

W. J. WICKMAN, Secretary.

Merced County.

The regular meeting of the Merced County Medical Society was held in the office of Dr. Rucker, August 4th. The attendance was good. The paper for the evening was prepared and read by Dr. Wolfson, the subject being the "Hydriatic Treatment of Typhoid Fever." The paper was a good one, showing familiarity with the subject. It was thoroughly discussed, bringing out some good points, and making a very profitable meeting for all present. The reader is a firm believer in hydrotherapy, and the majority of those present agreed that water externally and internally constitutes the chief treatment in this disease.

W. E. LILLEY, Secretary.

Napa County.

The regular meeting for August was held at Aetna Springs, August 27th. There was no set program, but the members present reported and discussed many interesting cases, and at 6:30 adjourned to a banquet, which was enjoyably dispatched, Dr. Osborne presiding and maintaining parliamentary order. The resignation of Dr. Beyersdorf was read and discussed, action being postponed for one month in order that effort might be made to persuade the doctor to withdraw his resignation. As he lives at somewhat of a distance, it is impossible for him to attend meetings, which was the reason for his presenting the resignation.

J. L. ARBOGAST, Secretary.

Orange County.

The regular meeting for the month was held on the evening of the 6th of September. The attendance was less than usual, owing to the fact that many members were in San Francisco attending the Con-

clave. The evening was profitably spent, however, in reporting cases. Dr. Herbert presented a very interesting report of a case of bradycardia in a man of 45. He had been subject to periodic attacks of asthma since boyhood, but the bradycardia was not noticed until one year ago, subsequent to a traumatism resulting in the fracture of several ribs. The question arose, Was the bradycardia the result of the asthma or of the traumatism? The pulse for the last year varied from 24 to 40 per minute. Other cases were reported by those present, and the meeting then adjourned.

H. S. GORDON, Secretary.

San Diego County.

The regular meeting for the month was held on September 2nd, at which time Dr. R. L. Doig read a most excellent paper on the use of epinephrin, the active principle of the suprarenal gland, particularly in asthma. (We hope to be able to publish the paper at no distant date.—Ed.)

THOS. L. MAGEE, Secretary.

San Francisco County.

The regular meeting for the month was held on the evening of September 8th, the president in the chair. Drs. Herbert Moffitt and C. M. Cooper drew attention to the value of good radiograms of the chest in helping to differentiate between intra-thoracic tumors and aneurisms, especially in those cases where the clinical fluoroscopic findings were not in accord, and showed a print demonstrating a much enlarged thymus gland in a child of lymphatic constitution, thus demonstrating a means of possible diagnosis in such lymphatic patients. Dr. E. Schmoll delivered a most able essay on the "Pathogenesis and Treatment of Gout." Dr. E. C. Dudley, of Chicago, delivered his justly celebrated "Lantern Slide Clinic to Illustrate Pelvic Surgery in Its Relation to the Broad Ligament."

A number of applications for membership were received, and the following were elected to membership: Drs. A. E. Regensburger, S. R. Zacharia, Carl Renz, F. H. Stibbens, Xavier Dodel, E. E. McKay, Joseph W. Henry, Julius Voje, W. G. Mizner, Samson American, Bertha Saunders, Elizabeth Keyes, P. J. Conran, Milton E. Lando, Charles E. French, G. A. Weyer, W. J. Jackson, A. J. Lartigau, Emile Schmoll, W. F. Beerman.

A discussion upon the progress made by the executive committee in the matter of the arrangements for prosecuting illegal practitioners was precipitated by Dr. Tait. It appeared from the report of the committee that there had been some misunderstanding as to the exact duties of the committee, and that they had not been officially furnished with sufficient data. They reported progress and a desire and intent to do everything possible to energetically prosecute the work placed in their hands by the society.

The committee on ethics reported as follows:

The committee on ethics desires to present the following report in regard to the matter of charges of unethical conduct made against one of the members of this society for offering to the CALIFORNIA STATE JOURNAL OF MEDICINE an advertisement of a private institution, in which the member stated that he used a remedy, in connection with certain treatment, that was held by the editor of the JOURNAL to be a quack remedy. Your committee took it upon themselves to lay this question of advertising of quack remedies before the committee on ethics of the A. M. A. As a result of this, the secretary of the A. M. A. referred the matter back to the Medical Society of the State of California. It is quite apparent to your committee that this was due to the fact that the *Journal of the A. M. A.* receives in its advertising columns material of the most questionable character. When one considers that one of the principles of ethics of the association is that "It is equally derogatory to professional character for physicians to dispense or pro-

mote the use of secret remedies," it is plain to your committee that the committee on ethics of the A. M. A. realizes that the *Journal* has grossly abused the principles for which the association stands, and that it hesitates to commit itself to a public acknowledgment of this fact.

Your committee respectfully asks the County Society for permission to lay the matter before the Judicial Council of the A. M. A., and also suggests that the entire matter be referred to the Medical Society of the State of California. In this way, should the Judicial Council fail to act in the matter, it will be possible to bring it before the A. M. A. at the next annual meeting.

In laying the matter before the Judicial Council your committee begs leave to express as forcibly as possible the feelings of this society in regard to the equivocal position of the association.

The committee on ethics of the San Francisco County Medical Society presents the following report on the charges preferred by Dr. Philip Mills Jones against Dr. Joseph Ardenyi for signing what he knew to be an untrue certificate of death:

At a meeting of the committee, held September 12th, 1904, Dr. Ardenyi admitted the truth of the charge, and pleaded in extenuation his desire to protect the reputations of a colleague, who gave the anesthetic, and himself.

Your committee, assuming the good faith of Dr. Ardenyi's explanation, is of the opinion that under all circumstances the falsification of a death certificate or any public document by a member of the medical profession is reprehensible and deserving of the censure of the society.

September 13th, 1904.

ROBERT D. COHEN.
H. D'ARCY POWER.
EMMET RIXFORD.
D. A. STAPLER.
PHILIP KING BROWN,
Chairman.

On motion, the report of the committee was approved and adopted.

W. F. BARBAT, Secretary.

Santa Barbara County.

The Santa Barbara County Medical Society held its regular meeting August 10th in the parlor of the Arlington Hotel. The following members were present: Dr. Charles Anderson, president; Drs. Barry, Conrad, Cunnane, Mansfield, Morrey, Newman and Sidebotham. Visitor, Dr. E. A. Dial.

The following resolutions of respect to our late associate and vice-president, Dr. Charles E. Vaughan, were presented by Dr. H. Sidebotham, and adopted by the society:

Resolved, That the Santa Barbara County Medical Society wishes to record its sense of the loss it has sustained by the death of Dr. C. E. Vaughan, who was one of the oldest members and vice-president of the society, and that it wishes to express its sincere sympathy with his widow, Mrs. Vaughan, and family.

The secretary is hereby instructed to present a copy of the above resolutions to Mrs. Vaughan and family.

Dr. Sidebotham reported a case of "Puerperal Eclampsia" successfully treated by the removal of four tumblerfuls of blood and the intravenous infusion of forty-one ounces of normal salt solution.

Dr. Barry would like to know if anyone has had any experience in the serum treatment of cholera infantum. He also reported two cases of diphtheritic croup successfully treated with antitoxin.

The paper of the evening, "Pathology and Treatment of Diphtheria," was read by Dr. David Conrad. He defined diphtheria as a specific infectious disease produced by a bacillus of toxic origin. He said it was recognized as a distinct entity by the early Greek

writers, but Bretanneau published the first accurate description of the disease in 1821. Very few changes were made in Bretanneau's classical description until the discovery of the bacillus by Klebs in 1883, and the verification by Loeffler a year later, which produced a complete revolution in the management and treatment of the disease. He gave a painstaking and accurate description of the investigations and experiments made by both Klebs and Loeffler, together with their method of cultivation and propagation of the specific bacilli. He said the cultures may preserve their vitality for months, growing well in glycerin agar, blood serum or ascitic fluid, some being much more easily propagated and virulent than others. In treatment, he said, there was nothing to be gained by attempting to distinguish between membranous croup and diphtheria; neither should one wait for a microscopical verification of a diagnosis before beginning the use of antitoxin. The treatment should be prophylactic and curative.

Quite an interesting discussion followed the reading of Dr. Conrad's paper, and, as a result, the following resolution was unanimously adopted:

Resolved, That it is the sense of the Santa Barbara County Medical Society that when "diphtheria" exists among poor people, the city should furnish free of charge a sufficient quantity of antitoxin for the treatment of each case; also a sufficient quantity for the purpose of preventing the spread of the disease.

The secretary is hereby instructed to present a copy of the above resolution to the Honorable Mayor and City Council.

Dr. Philip S. Chancellor has located permanently in Santa Barbara. Dr. William F. Blake has located permanently in San Francisco.

At a regular meeting of the Santa Barbara County Medical Society held in the parlor of the Arlington Hotel, Sept. 14, 1904, the following resolutions were adopted:

Resolved, That the Santa Barbara County Medical Society hereby reaffirms and emphasizes its belief in proper vaccination as a protection against small-pox; and that it is further of the decided conviction that inoculation with pure vaccine virus followed by cleanliness of the wound with good sanitary surroundings is an entirely innocent and harmless measure.

The secretary is hereby instructed to furnish a copy of the above resolution to each daily paper published in Santa Barbara; also one copy to the secretary of the California State Board of Health, and one to the secretary of the California State Medical Society.

W. B. CUNNANE, Secretary.

Siskiyou County.

On September 2nd, Dr. Philip Mills Jones met with Drs. Collar, McNulty, MacAllister and Spalding, at Yreka, and discussed the advisability of forming a county medical society. The time was rather inopportune, as most of the physicians of the county had gone to San Francisco. Dr. Collar consented to act as chairman, and Dr. Spalding as secretary, of a temporary association, and to arrange for a subsequent meeting at which more physicians of the county could be present, when organization might be effected.

Sonoma County.

The meeting for August was held at the residence of Dr. J. W. Seawell, Healdsburg. Dr. George Ivan-covich in the chair. Transfer cards were issued to Drs. E. A. Hardin, Pacific Grove, and G. W. Peck, Sawtelle. Dr. Charles P. Maddux was elected to membership. Two applications were received and referred to the censors. The following resolution was offered:

Resolved, That the word "regular" be stricken from the constitution, Article III, last line, page 1, and

wherever the same shall be found in the constitution and by-laws.

It was decided to meet in Santa Rosa in September, at the office of Dr. G. W. Mallory. Dr. R. M. Bonar read a paper on the "Dissemination of Disease." The physician who lives up to his calling nowadays must be not only a close observer, but a frequent advisor on sanitary science; it is greater to prevent disease than to cure it. Our knowledge of the manner in which disease is spread is based entirely on the theory of specific causation by bacteria or toxins. More especially is this true of acute infectious diseases, constituting by far the largest class we are called upon to deal with. Heredity is negligible, for with the exception of syphilis and very rarely tuberculosis (?), no disease is passed directly from parent to offspring. The transmission of bacteria is not in themselves, but accidentally, by means of foodstuffs, air, insects, animals, personal contact, excreta, etc. Typhoid fever is the most prevalent of the water-transmitted diseases in this country. Many epidemics are traced to water and milk, where the cans, etc., are washed with infected water. The epidemic at Stanford University was cited, as was also that at Butler, Pa. In the latter place a washout, one year ago, directed a polluted stream into the reservoir, and in about five weeks 3,500 out of 15,000 people had the disease. Cholera was also mentioned. A city with a water supply infected with the comma bacillus is doomed. Owing to our present knowledge of the disease, no civilized country will probably ever again be afflicted with an epidemic of cholera. Cats and dogs may carry diphtheria, scarlet fever, smallpox, etc., especially when these animals are allowed to enter the sick room. Rats are the natural disseminators of bubonic plague. The common house fly is well equipped for carrying disease germs, and doubtless often does so. The bottom of the fly's foot is covered with short, stiff hairs, and looks not unlike a scrub-brush. As these insects are apt to search for their food in excreta, pus, spoiled foodstuffs, etc., it would be reasonable to look for contamination in their resting place. The most important discovery in medical science of the last century was the discovery of the role played by the mosquito in the transmission of malaria and yellow fever. As the variety of mosquito transmitting the plasmodium of malaria is a night flyer, its avoidance is more easily accomplished. The well-known discoveries in regard to yellow fever, following directly after the late war with Spain, would have been a sufficient victory, had no other benefits resulted. With the aid of Dr. Leonard Wood, as Governor-General of Cuba, Dr. Walter Reed was able to prove the transmission of yellow fever, and to show the method for its eradication. Dr. Browne talked on the subject of "Immunity," with especial reference to malaria. Dr. Nott called attention to the dangers from common drinking places or washrooms, and from the ordinary Chinese laundry. After the scientific session, the society was invited to partake of Dr. Seawell's hospitality, Dr. Ivancovitch acting as toastmaster. The society adjourned at midnight, after a most enjoyable evening.

Meeting for September, held on the 8th at the office of Dr. G. W. Mallory, Santa Rosa. The amendment introduced at the August meeting, striking out the word "regular" wherever it occurs in the constitution and by-laws, was unanimously adopted. Dr. Browne of Healdsburg read a paper on the "Administration of Anesthetics." He called attention to the wonderful value of the discovery of anesthetics and to their great range of usefulness. The patient should be carefully examined, and the particular anesthetic to be employed carefully chosen. Special attention should be given to the examination of the urine, kidneys, heart and lungs. In the very young and the aged he thought chloroform the better anesthetic; in the middle aged his choice was ether. He also touched upon subarachnoid anesthesia, which

subject was also treated of by Dr. Wells, in a subsequent paper. In the discussion which followed, the work of Dr. A. W. Morton, of San Francisco, was referred to and highly commended.

The next meeting of the society will be held at Eldridge, October 13th, at 3:30 P. M. Drs. W. J. G. Dawson and E. Gray will give a clinic. The society will visit the Home for Feeble-Minded, and a full attendance is expected. The society is in a most flourishing condition, and expects to add to its numbers many physicians who are graduates of other schools than the regular, but who simply "practice medicine," without dogma.

G. W. MALLORY, Secretary.

Alumni Association.

The regular bi-monthly meeting of the Alumni Association of the Medical Department of the University of California was held in the rooms of the Philomath Club, on August 29, 1904. The following papers were presented: "Two Cases of Sarcoma of the Humerus," exhibition of patients, by Dr. Harold Brunn; "Poisonous Reptiles and Their Venom," by Dr. John Van Denburg; "The Elixir of Life," by Professor Edmund O'Neill, of the University of California; address, by Dr. Richard C. Cabot, of Harvard University, Boston.

L. S. SCHMITT, M. D., Secretary.

Association of South Side Physicians (San Francisco).

The regular meeting for August was held on the 26th, at the office of Dr. W. F. Barbat, Dr. A. Eichler, president, in the chair. Drs. L. Breitstein, Kavanaugh, F. Zumwalt, W. McLaren, Hamilton, Kahl, Burns and Nast were elected to membership. Dr. E. E. McKay presented a specimen of fibroid protruding from the os uteri. Dr. J. C. Voje presented a specimen of fibroid with cystic ovaries. In both cases immediate operation had been necessitated by hemorrhage. Dr. W. F. Barbat demonstrated rapid development of X-ray plates. He was also kept busy securing applications to the County Medical Society. Dr. A. Eichler demonstrated the Bottini instruments in prostatic disease. He said that relief from symptoms could be secured for several years by this method, but it was to be applied only when the more radical operation would be dangerous.

A. L. W. ZILLNER, Secretary.

California Academy of Medicine.

The regular meeting for August was held on the night of the 23rd, the president, Dr. Huntington, in the chair. Dr. Jerome Lartigau presented a resume of the present knowledge of the relation of bacteria to the production of biliary calculi, embodying some later experimental work of his own, hitherto unpublished. He found, in common with some other investigators, that cultures of almost any germ will produce stones, under certain given conditions. Briefly, the required conditions are, stasis, sufficient to produce a mild congestion, and a not too virulent culture. The bacillus coli did not seem to be more responsible than other bacilli, nor to produce stones differing from those produced by other forms of bacteria; in this particular he differed from one or two other observers. He thought the path of infection was often through the mucosa, the bacterium being carried by leukocytes; the duct might be tied yet colicystitis result. Motile germs seemed to be more productive of the lesion than cocci; sterile foreign objects introduced into the gall bladder did not result in stone formation. The essay of Dr. Lartigau was discussed by Drs. Kerr, F. B. Carpenter, C. M. Cooper, George Blumer, Thomas W. Huntington, and closed by Dr. Lartigau. The only point in the discussion outside of the amplification of data presented by Dr. Lartigau, was the possible relation of cancer to stones. From the views ex-

pressed it would appear to be the consensus of opinion that either might be the primary cause of the other. Dr. C. M. Cooper presented a patient with a rather unusual form of arrested development. The boy was a Russian, 16 years of age, and rather bright. The father gave a partial history of syphilis. There was total absence of the external auditory meatus and partial absence of the auricle. The semi-circular canals were shown in a radiogram. A plastic operation might easily be performed, but as the boy got along very comfortably he did not care to undergo the operation.

Dr. Cooper also called attention to a method of X-ray examination practiced by him, and so far as he knew, an original method. In examining the abdomen, he inflated the colon with air and then examined with the screen, thus being able to see clearly the shadow of the kidneys, liver, spleen, colon, etc. Dr. Moffitt commended the proceeding highly, and had found it of very great usefulness.

Dr. Thomas W. Huntington gave a resume of twelve cases of operation for posterior drainage of the stomach by means of posterior gastro-enterostomy. (This paper, or an abstract of it, will be published later.) The paper was discussed by Drs. Moffitt, Tait, Cooper and F. B. Carpenter.

Pacific Society of Railway Surgeons.

The Pacific Society of Railway Surgeons chose San Francisco as the meeting place for 1905, and the following officers were elected to serve the coming term:

President, Dr. N. W. Morrison, chief surgeon of the Santa Fe, San Francisco; first vice-president, Dr. H. W. Fenner, Tucson, A. T.; second vice-president, Dr. W. O. Spencer, Huntington, Or.; treasurer, Dr. F. L. Adams, Oakland; secretary, Dr. J. P. Dunn, Oakland; member of executive committee, Dr. E. M. Keys; committee on arrangements for the convention next year, Dr. W. B. Coffey and Dr. J. H. O'Connor of San Francisco and Dr. D. D. Crowley of Oakland.

STATE BOARD EXAMINATION, OCTOBER.

To the Editor of the STATE JOURNAL: An examination will be held by the Board of Medical Examiners of the State of California, at the city of San Francisco, commencing on the 25th of October, 1904. Credentials should be filed with the secretary at least ten days before the examination.

CHAS. L. TISDALE, Secretary.

STATE NURSES' ASSOCIATION.

The California State Nurses' Association is an organization that should receive the heartiest support of every physician. "The object of the State Association is to unite into one body the County Associations and harmoniously work for the advancement of the graduate nurse and the establishment of higher standards and more thorough courses of study in our training schools. The State Association hopes to secure legislation which, through state registration of nurses, will mark a most important advance in the status of the profession in California." The association has commenced the publication of a journal, the first number of which was issued in August; the second number is to be issued in February, and thereafter it will be issued more often, if it meets with sufficient support. We certainly wish it every success, and we wish the association good luck in its efforts to secure registration.

American International Congress on Tuberculosis is to be held October 3d, 4th and 5th, 1904, under the auspices of the Universal Exposition, St. Louis, the American Congress on Tuberculosis and the Medical-Legal Society of New York.

PUBLICATIONS.

The Student's Handbook of Surgical Operations. By Sir Frederick Treves. New edition revised by the author and Jonathan Hutchinson Jr. (W. T. Keener & Co., Chicago), \$2.50 net. The need for handbooks or compends is questionable. In preparing for an examination in operative surgery the student will derive but meagre benefit from descriptions of operations, however well condensed they may be. On the contrary, a multiplicity of illustrations, especially colored illustrations, will prove of incalculable value. The latter fact is strikingly ignored in the present volume, "Abridged from the New Edition of Treves' Large Manual of Operative Surgery." Compiled hurriedly and with apparently no other object than to meet the publisher's order, it abounds in inaccuracies, and fails to even mention numerous important modern interventions. Bisection of the kidney in lithiasis is condemned as very bloody, dangerous, often leading to nephrectomy and causing death; cholecystectomy is not even alluded to, whereas useless or rare operations, such as pyloroplast and cholecystocenterostomy are described in detail; McBurney's incision in appendicectomy is deemed "clumsy and rather cramped." The description of Kocher's operation for goitre will amuse those who have visited that great master's clinic in Berne. A similar want of accuracy is noticeable in the illustrations. Figure III shows *one-half* of the pubes shaved in the operation for inguinal hernia. The typographical work and the binding are the very commendable features of this otherwise superfluous publication.

D. T.

Eat California Fruit. Published by the Southern Pacific Company for free distribution. Time was when there was much bitterness throughout the state against the Southern Pacific; possibly it was earned, possibly not. Be that as it may, the Southern Pacific, at the present time and generation, in its advertising and promotion departments, is doing a wonderfully good work for California. The little pamphlet under discussion will be found of great interest to anyone who likes fruit—and who does not? To even the old Californian, or the "Native Son," it will be of interest and convey not a little of probably new information about our own state. To those who are so unfortunate as to be compelled to live elsewhere, it will be a revelation. Be an adjunct to the Promotion Department and distribute some of these pamphlets.

Surgical English, the awful atrocity, is having a most direful influence, and one that is spreading rapidly. And now comes the dignified *Journal of the A. M. A.*, and in an editorial on the "Pneumonia Commission," refers to "some of the best-known internists of the country"! Is there not a medical dictionary in the office of the *Journal*? An "internist" would, logically and etimologically, be one who had to do with an indoor practitioner of medicine, or a resident in a hospital. It does not seem probable that this is the sort of animal referred to. The medical dictionary says that a "physician is one who practices medicine," and a "surgeon one who practices surgery." Is not that sufficient distinction without dragging in a bastardized German expression?

Transactions of the Seventy-first Annual Session of the Tennessee State Medical Association, 1904. It contains a number of papers of interest which are buried in this form of publication. There is a list of members of the association covering 16 pages at the back of the book. With such a present membership, and with a practical certainty of greatly increasing it, one is filled with wonder that Tennessee has not already undertaken the publication of its transactions in journal form. Every state association that can afford it, ought to issue its own journal.

Serums, Vaccines and Toxines in Treatment and Diagnosis. By W. Cecil Bosanquet, M. A., M. D., etc. Published, in this country, by W. T. Keener & Co.,

Chicago; price \$2.00 net. This little volume, well gotten out and bound in limp cloth, should prove to be a useful book of reference for the busy practitioner who has occasional need for serums, etc., in treating the patients in an every-day practice. Apparently it is intended to be but a compilation of well-known work, and presents, in little, the sum of our present knowledge in relation to the practical side of these questions.

A Text-Book on Alkaloidal Therapeutics, being a condensed resume of all available literature on the subject of the active principles added to the personal experience of the authors. By W. F. Waugh and W. C. Abbott, with the collaboration of E. M. Epstein. Chicago: The Clinic Publishing Company, 1904. Price, in cloth, postpaid, \$2.50. The volume should be a valuable one for reference, to any doctor who even occasionally makes use of the alkaloids. It is well gotten up, interleaved for memoranda, and the make-up is excellent.

The Ainu Group at the St. Louis Exposition. By Frederick Starr. Chicago: The Open Court Publishing Company. The price of the book is not stated. It contains 118 pages and a number of excellent illustrations. Its interest is purely anthropological and not at all medical. It does not pretend to be a deep study of the Ainu, but rather an account of a trip through the island of Yezo, with a description of the group brought to this country, and some general notes and reflections on the people.

The Nature of the State. By Paul Carus, from the Open Court Publishing Company. A little pamphlet containing excerpts from the *Open Court* dealing with the question as to the existence of the state, as such, and the duty of the citizen to the state, etc. "The argument that disproves the existence of the state and of other superindividual entities, will serve to disprove the existence of the individual." That's about what real, heavy German metaphysics does!

The "detail man" gets through the armor and under the hide of pretty much every doctor. The editor of the *Habucmanian Monthly* has a few choice compliments to this particular genus of the species nuisance, and he speaks feelingly. It seems only possible to extend a little sympathy—a few kind words—to our brother in his trouble. Remember that even the "fleas have lesser fleas to bite 'em, and so the world goes on, ad infinitum."

Sensory Distribution of the Fifth Cranial Nerve, by Harvey Cushing, is published in the *Johns Hopkins Hospital Bulletin* for July-August. It is well worth careful study. The same publication contains a most excellent article on the "Chemical Origin of Leukocytes," by Dr. E. Schmoll.

"The Development of the Hymen, Together With Its Anatomy and Pathology," is the subject of a most excellent thesis by Dr. George Gellhorn, in the *American Journal of Obstetrics*, August. It is one of the best articles on this subject that has been published for a long time.

Ants and Some Other Insects; An Inquiry Into the Psychic Powers of These Animals, with an appendix on the peculiarities of their olfactory sense. By Dr. August Forel, University of Zurich. Open Court Publishing Company.

Insurance examinations, from various standpoints, and the effect on life expectancy of various diseases, forms the subject of a symposium by several authors in the September number of the *Canada Lancet*.

"Indications for Cesarean Section," by Dr. Charles D. Lockwood, Los Angeles, appears in the *American Journal of Obstetrics* for August.

Transactions of the Florida Medical Association for the years 1903 and 1904. No table of contents; no index; printed on good paper.

A TRIFLING MISAPPREHENSION OF FACTS.

In the August number of the *Medical Sentinel* appeared the following:

Do Oregon Doctors Make a Bad Impression?—

Dr. Jones, editor of the California State Medical Journal, was the guest of the Oregon State Medical Society a year ago, at which time the Oregon Society decided to make the attempt to get the next meeting of the A. M. A. at Portland; he was also a guest of honor at the banquet. Although Oregon has always been a helper of California in getting various large bodies upon the Coast for our State from the South, Dr. Jones returned to his home and began a counter movement against Oregon, in strong contrast to Dr. Anderson, of the Pacific Medical Journal, who was favorable to Portland, and a resolution was put through the State Society favorable to the meeting at San Francisco, all of which leads us to infer that the impression created in Dr. Jones' mind, from the attention and courtesy shown him, must have been very unfavorable to Portland and to the Oregon State Medical Society.

To this the writer took exception, as it very decidedly distorted his position and misrepresented his personal attitude toward the physicians of Oregon and of Portland. The following (infra) letter was at once mailed to the publication referred to, but does not appear in the September issue; its receipt was acknowledged verbally, but not by mail. It may be said, in passing, that the writer visited the last meeting of the Oregon State Medical Association, enjoyed it and himself very much, and publishes in this number of the JOURNAL a report of the meeting.

Before giving the letter mentioned, it might be as well to set forth two rather interesting telegrams that passed, unknown to me, while in Portland, August 29th to September 1st, 1904.

246-SF.P.VN.48

Portland, Ore., Aug. 29, 1904.

Dr. H. Bert Ellis,

243 Bradbury Bldg., Los Angeles.

Dr. Jones says here he was not for Los Angeles but fought for Portland at Atlantic City stating if he had been for Los Angeles she would have won claiming Oregon support for his Journal therefore. You and I know differently. Wire me immediately his well-known position at Atlantic City.

DR. H. W. COE.

511 p.m.

Of the reply I have only a copy, not so full of detail, but reading as follows:

Ellis out of town. Both Jones and Ellis instructed to vote for California. When they found California impracticable both worked for Portland.

F. D. BULLARD.

The only corrections I can suggest in the statements above made are rather trifling ones, relating merely to minor facts. I did not say I fought for Portland; I did not say that if I worked for Los Angeles she would have won; I did not ask Oregon's support for my journal; I do not own any journal; I have never asked anyone's support for what I don't own. As a member and as chairman of the publication committee of our State Society I was instructed to offer to the Oregon Association equal representative ownership in our publications; that was all. I must apologize for consuming so much space over a matter so trivial, but can only plead a desire to have the record appear clear.

To the Medical Sentinel, Portland, Oregon:

In the issue for August, of your excellent journal, you do my inconspicuous self the compliment of referring to me in the "editorial notes" in a manner that is, to say the least, hardly courteous. I did attend your last annual meeting, and thoroughly enjoyed it. I expressed the opinion, publicly and privately, that in my humble judgment it was one of the very best medical society meetings I ever attended. I accepted an invitation to attend your banquet, and greatly enjoyed both the banquet and the very witty speeches of your distinguished members. I carried away the very best possible impression of the doctors of Oregon, and subsequently the journal of which I happen to be the unfortunate editor published the longest report of the meeting that has been published, so far as I am aware. Unfortunately, however, you have been sadly misled in the balance of your statement. You say that I went south and "began a counter-movement against Oregon," and intimate that I was active in urging the passage of a resolution through our own State Society endorsing San Francisco as the place for the next meeting of the A. M. A. This is very far from the actual fact. I opposed the resolution inviting the A. M. A. to meet in San Francisco; I did not, in any way, work against Portland as the place for the next meeting. When my opinion was asked, I expressed it very frankly—that Portland was not a good place for the association to meet, *because of totally inadequate hotel accommodations and the lack of any hall of sufficient size for the general sessions, exhibits, etc.* In your own journal you have published statements which exactly support this contention.

I have not the slightest objection to taking all the kicks that are legitimately coming to me, but I must emphatically protest against those which are unearned. Personally I have done everything humanly possible to stimulate the friendly feeling between Oregon and California. In season and out of season I have deplored the fact that we physicians in these two near-by states see less of each other than we do of our fellow practitioners east of the river. It should not be. I must deplore the fact that you have distorted an honest opinion as to the inadequacy of Portland's accommodations into a personal dislike or antagonism of Oregon's physicians. It does not seem to me exactly in accord with journalistic courtesy to make the editor of an official publication responsible for the acts of the controlling society.

In the House of Delegates of the A. M. A. my hands were tied by "instructions," the passage of which I opposed at the time of our State Society meeting. When it became evident that San Francisco was quite out of the question, and I was free, I voted for Portland, in spite of my better judgment, but on the assurance of Dr. Mackenzie that hotels would be built by the time of the A. M. A. meeting. I sincerely trust that they may be, for I think another experience like those at Columbus and at New Orleans would injure the association. I have wished and do wish every success to Oregon and to Portland, and in closing can only say that all possible assistance from California will be cheerfully and gladly given, and that, so far as I, as an individual and as the editor of our society publication am concerned, your physicians have my highest regard and respect, and I will do all that I can to add to the success of the Portland meeting. Respectfully,

PHILIP MILLS JONES.

Now that the facts have been set forth, the incident is closed. "Evidently all Portland has to do is to find halls for the various sessions to assemble in and places for the visitors to sleep, and the enthusiasm of the great Pacific country and Inland Empire will do the rest."—*Medical Sentinel*, September. Yes, that's all. If we, of California, can help you in any way to find these things or aid in any other part of the work, we shall be very glad to do so.

P. M. J.

SOME MECHANICAL ASPECTS OF SPINAL CURVATURE.—DEMONSTRATION OF WULLSTEIN'S APPARATUS.*

By JAMES T. WATKINS, M. D., San Francisco.

THE OBJECT of this paper is to direct attention to certain mechanical aspects of the normal spine which have recently been worked out, notably by Schulthess in Zurich, by Wullstein in Halle, by Lovett in Boston and to a less degree by myself, throwing light upon the causation of lateral curvature, and from which the principles of a scientific treatment may be deduced. It is also intended to demonstrate an apparatus by means of which these theoretical considerations can be put into practice.

From the view point of the mechanician, the normal spine is a flexible rod, and subject to the laws governing flexible rods. It is capable of pure flexion, of pure extension, of side bending and of rotation. A very little side bending is said to be possible when the spine is in an attitude of about 15 degrees of flexion; but for practical purposes side bending and rotation are indissolubly associated in one compound movement, though the degree of side bending does not appear to bear a fixed relation to the degree of rotation, and vice versa; the point is, *neither occurs without the other*.

In the dorsal region where the antero-posterior diameters of the vertebrae are rather greater than their transverse diameters, when side bending from the flexed position occurs a backward rotation takes place; that is, the bodies turn on their longitudinal axes toward the convexity of the curve, and the spines toward the concavity. If the spine be hyperextended and bent to the side, the torsion is reversed; that is, the bodies turn toward the concavity, the spines toward the convexity of the curve. The back appears more prominent on the side to which the bodies rotate.

The transverse diameters of the lumbar vertebrae are greater than their antero-posterior diameters. When torsion occurs in this portion of the spine it is the reverse of the torsion that takes place in the dorsal column; that is, in flexion the bodies turn toward the concavity of the spinal curve, and in hyperextension toward the convexity. Again, "C-shaped" curvatures have been observed, postural in character, and probably originating in the lumbar spine, in which the rotation was all of the lumbar type; that is, with all the bodies looking toward the concavity of the curve.

Lateral bending then is associated with rotation. Conversely it would be expected that a primary rotation would be accompanied by lateral bending. Such is indeed the case. It has been demonstrated that if the dorsal bodies rotate to the right the spine bends to the left, and vice versa. When the lumbar spine is flexed, and rotation of the bodies occurs to either side, the spinal segment as a whole bends to that side.

If rotation occurs in either segment when it is hyperextended, it is the reverse of the rotation that would take place in the flexed spine, and is accompanied by a lateral deviation of the trunk opposite to that which would accompany rotation in the flexed position.

The phenomena of side bending and rotation as they occur in the spine can be demonstrated by means of a straight rod of soft rubber cut so that its antero-posterior and transverse diameters bear the same mutual relations that they do in corresponding segments of the spine. Torsion is said to result from any motion in which all the particles of a straight flexible rod do not move in parallel planes. The spinal column presents normally a series of antero-posterior curves; therefore, any attempt at lateral bending must be, and is, accompanied by tor-

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

sion of the column, the bodies rotating one way where their antero-posterior diameters are greater, and the opposite way where their transverse diameters are greater.

Experiments have shown that superincumbent weight applied obliquely to the spine of a cadaver produced all the phenomena of spinal curvature, the bodies in the dorsal region turning to the convexity, the spines toward the concavity, and the ribs being more prominent on the convex side behind. At the same time the lumbar vertebrae remained unaffected or rotated in the opposite direction. It has just been said that the same condition could be produced in the normal spine by making side bending from the flexed position.

The inference is obvious, therefore, that whatever the predisposing causes of spinal curvature may be, the mechanical factors are the weight of the head and trunk applied to the column, which, from any cause, has either twisted on itself or adopted an attitude of side bending.

By way of parenthesis, it may be said that the most frequent predisposing cause of rotation is probably uncorrected astigmatism; the most frequent causes of side bending (and of rotation, for that matter) from the flexed position, is the ordinary form of school furniture. Flexion and side bending is the attitude in which children, for the most part, write and study during school hours.

It is evident, from what has been said, that there is ground for thinking the term "secondary curve" to be, in a sense, misleading; for one, if not both, secondary curves would appear to be a direct result of the same conditions which caused the primary curve, but acting upon a part of the column presenting different mechanical conditions. In the light of these facts, the treatment of a simple "C-shaped" scoliosis in a column which is mobile throughout would consist in a general strengthening of the extensor muscles, to counteract the tendency to flexion, and in reversing the torsion which is present, by practicing appropriate side bendings.

Often, as in the "S-shaped" curvatures, the problem is more complicated. There are curves and so-called "compensatory curves"; torsions and reversed torsions, the increased forward bend in the dorsal column is associated with an increased backward bend in the lumbar column. Exercises directed to combating one of these elements must necessarily increase the other; untwisting the torsion in one segment of the spine accentuates the reverse torsion in the adjacent segments. Still more difficult is the problem when a segment of the distorted spine becomes fixed, first by changes in the soft parts, and secondly by changes in the vertebrae themselves, bony ankyloses. In such a case the fixed portion of the spine is no longer a flexible rod; no longer subject to the laws governing flexible rods. If the dorsal segment be fixed, a horizontal thrust applied in any direction to the thorax will cause it to rotate, or to be displaced as a whole, upon the mobile portions of the column above and below the fixed portion; the latter is not appreciably affected. If it is attempted to correct the costal hump and to diminish the torsion by exerting a thrust from behind forward on the angles of the prominent ribs, the lateral distortion of the spine will be increased in proportion as the costal hump is crowded forward. This is because this new torsion actually takes place in a portion of the spine which is still flexible, and therefore subject to the laws governing flexible rods. It has been observed that rotation in such a rod, or spine, is always accompanied by lateral deviation.

Conversely, if a thrust be exerted upon the thorax on the side of the convexity of the curve, a backward rotation of the segments adjacent to the fixed portion will take place. The lateral asymmetry of the body will be more or less corrected, because the lateral curves of the spine will be brought more

nearly in the median sagittal plane of the body, their convexity and concavity looking more nearly forward and backward; but this will be done at the expense of increasing the torsion in the mobile column and accentuating the angles and backward projection of the prominent ribs. Where a gain in height follows a purely lateral thrust it is due only to a flattening of the mobile compensating curves.

With these facts in mind, it at once becomes evident why treatment of compound and fixed curves as heretofore practiced by means of gymnastics, posturing, fixed and removable jackets, thickening the sole of one shoe, sitting on inclined planes, etc., has been unsatisfactory. Only some of the elements of the distortion were corrected at one time, and in correcting them other elements were increased. It is evident, too, that where a segment of the spine is fixed a thrust to exert a corrective action upon the ribs attached to that segment must be carefully compensated by counter thrusts to prevent loss of power through rotation of the thorax as a whole upon the mobile portions of the spine.

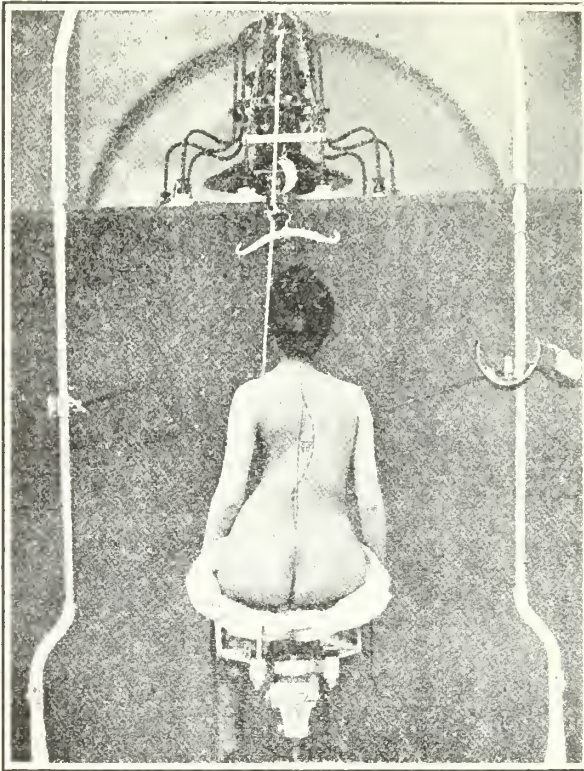
It is a principle of orthopedics that a deformity to be cured must not merely be corrected, but over-corrected, and maintained in over-correction during functional use of the part. In the foot, for example, this is a comparatively easy matter, since it is easily approachable from every side. In the spine, on the other hand, only one side and the ends—usually one end—can be touched. The most distorted portion cannot be grasped at all.

Still, in this apparatus devised by my friend, Dr. Wullstein of Halle—the one before you, I believe to be the only one as yet in America—just this thing can be done. Every element of the deformity can be separately corrected and over-corrected and maintained in over-correction while a plaster of paris jacket is being applied. Then it might reasonably be expected that the factors which caused the scoliosis—the weight of the head and trunk falling obliquely upon the column—would unmake it.

Before demonstrating the apparatus it may be well to recall the features it is designed to correct as they appear in the most frequent and complex form of rotary lateral curvature—the right dorsal, left lumbar convex type. First of all there is an exaggeration of the forward curve of the thoracic column with resulting round shoulders. It is compensated by an abnormal lordosis, or hollow back, of the lumbar spine. Then there is the primary lateral curve in the dorsal column and the lower, and possibly the upper, compensating curves, with elevation of one shoulder—usually the left—and asymmetry of the neck and shoulder contours. Next the torsion of the vertebrae in the primary and compensatory lateral curves. The trunk as a whole is displaced on the pelvis backward and to the right. As a consequence the left hip (really the left side of the pelvis) is made more prominent, the frontal planes of the chest and pelvis instead of being parallel, cross each other, and there results an asymmetry of the lateral body contours. Finally there is the costal hump on the convex side behind, the projection of the ribs in front on the side of the concavity, the associated flattening the ribs opposite these prominences, and the more or less marked distortion of the sternum.

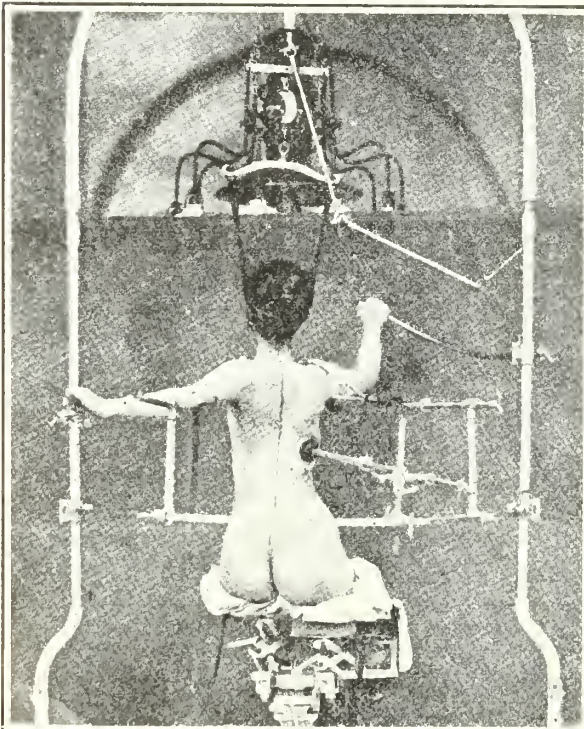
Turning now to the apparatus. The antero-posterior and primary lateral curves are corrected principally by forcible extension. For this purpose the apparatus, in place of the ordinary rope and pulleys, is provided with upper and lower screw tractions, by means of which a pull can be exerted upon the head, stretching the upper portion of the spine, and, at the same time, the whole seat depressed, stretching the lumbar spine.

In this way any amount of stretching force can be exerted without effort on the part of the operator. A dynamometer has been introduced, however, to record the amount of pull made. When a fixed curve is



M. E. Right sided dorsal kyphoscoliosis.

present, forcible extension is practically the only means by which it can be combatted. Wullstein's experiments with forced extension on the dead bodies of scoliotics showed that not merely were all the shrunken soft parts stretched, but the intervertebral



M. F. incomplete overcorrection.

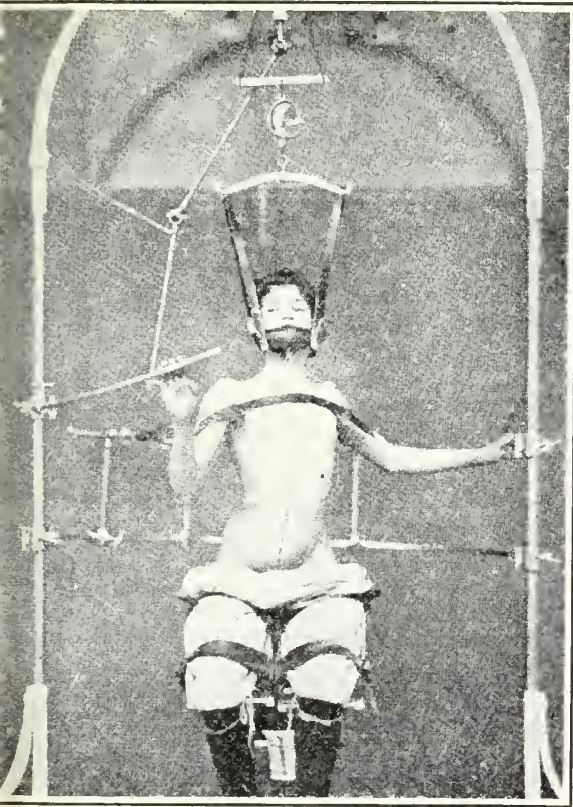
disks of the concavity, and especially those in the neighborhood of the wedge-shaped vertebrae, were stretched to twice and thrice their previous breadth, while on their convex sides the thickness of the disks was unchanged, or was even diminished by compression. Therefore, in this kind of a spine the forced extension may be regarded as a bending of the spine over the apex of the curve as over a fulcrum. Before applying his jacket, Wullstein uses forcible extension on this class of cases twice a day for a month or more.

The next step is correction of the secondary lumbar curve. The seat is divided into two lateral halves. Each half is provided with straps for fixing the thigh of that side, and by means of a screw each half can be tilted forward or depressed to any desired angle. If, as has been assumed, the lumbar spine be convex to the left and that side of the pelvis unduly prominent, depressing the right half of the seat will correct and over-correct the vicious lateral displacement of the body on the pelvis, causing the iliac crest and spine of the right side to become more prominent and at the same time drawn backward, so that the frontal planes of the chest and pelvis which did cross each other become more nearly parallel. Thus the lateral body contours have been made symmetrical. By a corresponding arrangement of the arm holders, the differences in the levels of the shoulders and the asymmetry of the neck and shoulder contours can be corrected. The costal prominences in front and behind are corrected by pressure pads. These pads are so constructed that after applying the jacket over the pad the rod holding it can be unscrewed, leaving the pad in place.

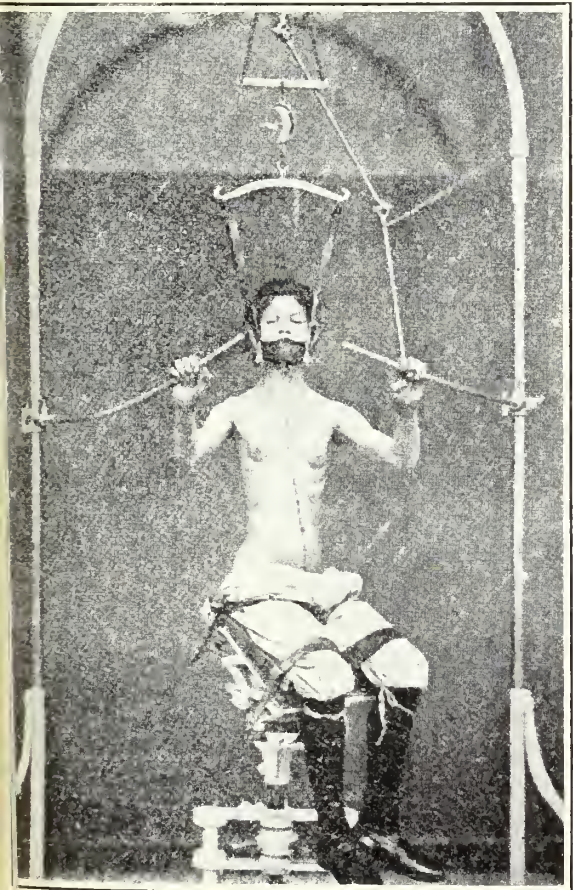
The torsion was partially corrected by the forced extension. How it would do this can be demonstrated by pulling on the ends of a handkerchief which has been twisted to simulate the scoliotic column. But it must be borne in mind that the problem is not merely to correct the twist in the column. If permanent results are to be obtained, the column must be *twisted in the opposite direction*—twisted so that a reverse deformity results. This may be accomplished by using the arm holders, united across the chest by a strap, as the two ends of a lever, and the posterior pressure pad as a pivot about which to twist the thorax in the opposite direction from that taken by the dorsal torsion. The detorsion of the lumbar spine is similarly exaggerated by means of a screw which enables the seat to be turned as a whole about its perpendicular axis. The degree of hyperextension is regulated above the posterior pressure pad by means of a rod at the upper end of the apparatus, along which travels a wheel carrying the upper extension contrivance. A slide regulated by a screw makes it possible to move the entire seat forward or backward, to control the lordosis in the lower part of the column. Finally, the fact that the seat slopes forward causes the thighs to make an obtuse angle with the pelvis, and renders it possible to apply any sort of a plaster jacket to the body while it is held in the over-corrected position. It is to be expected that under the influence of the weight of the body and of growth, a reversal of the previously existing conditions will be obtained. After two or more jackets applied at intervals of a few weeks, and when it is to be hoped the deformity has been overcome, gymnastics and massage must be prescribed with the utmost discrimination, to build up the muscles of the trunk which have become weakened through disuse. I may at some future time be permitted to place before you the scheme of such a treatment.

DISCUSSION.

Dr. P. C. Pahl, Los Angeles.—I am very sorry not to have had a chance to look over the paper beforehand, as this is a very deep subject. It has been

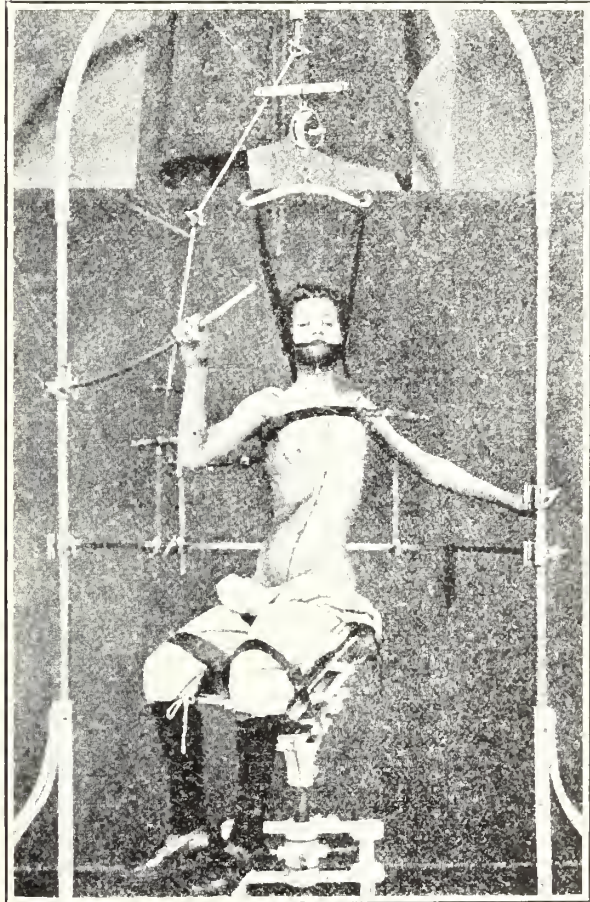


T. S. Untwisting the deviation in the dorsal column.



T.S. Untwisting the lumbar deviation.

very interesting to me. I wish to congratulate Dr. Watkins upon possessing such a complete and wonderful machine. I have had a machine made in Los Angeles very much after this idea. It does many of the things this machine does. Whenever you put a child or young woman, 15 or 16 years old, in a machine like that, I assure you you have a big job on your hands. I want to plead that you will thoroughly understand what scoliosis is; almost as dreadful as "white plague." It is a living death. There are people in all walks of life, because of this trouble, who live a living death. I want to tell you that the general practitioner is responsible for a great deal of this neglect. Our greatest competitors are the osteopath, the masseur and the "Christian scientist." They send these people to have braces made. There is no brace that will in any way help the patient's condition. They do great damage. They stunt the



T. S. Simultaneous detortion of both dorsal and lumbar curves.

growth. Treatment of this kind has to be over as small a period of time as possible. I find that at the end of a few days I have to remove the cast and apply another. I always put my patients to bed. Just imagine a young lady with scoliosis; cut off her hair and put on the apparatus which she ought to have; she will certainly object to going on the street, and to put the proper apparatus on and treat her properly she will have to go to a hospital, and be made a hospital patient. The very fact that they are off of their feet, fed properly and getting proper treatment, will give you wonderful results.

Dr. S. J. Hunkin, San Francisco.—I am very much interested in this paper, both from its theoretical as well as its practical standpoint. I take issue with the theoretic considerations, feeling they are based

upon premises that cannot be supported. The whole argument is founded upon the assumption that the bodies of the lumbar vertebrae are wider from side to side, while on the contrary the bodies of the dorsal vertebrae are wider from before backwards. As a matter of fact, however, the bodies of the dorsal vertebrae are not wider from before backwards than from side to side. They are either equal in the two diameters, or they are wider from side to side, as are the lumbar bodies; hence the reversed torsion deformities cannot take place by reason of flexion or hyperextension taking place in vertebrae whose bodies have their long diameters opposite in the different segments; and again it cannot be due to this in the mid-dorsal region where the excessive torsion occurs, for it is practically impossible to make hyperextension in this region. While I do not agree with the theory of the causation of the scolioses, I do most heartily concur with the practical value of the treatment advocated by Dr. Watkins, and the mighty corrective force exerted by his machine. A few months ago, at the suggestion of Dr. Watkins, I went to Halle and saw the machine in the clinic of Professor Wullstein, its inventor. I saw many patients treated and many after treatment in the apparatus, and I left convinced that the treatment of scoliosis had taken a great stride. Since Dr. Watkins procured the machine, I have had the pleasure of helping him use it on several patients, and I assure you that the opinion got at Professor Wullstein's has been fully borne out by the results obtained in Dr. Watkins' cases. One girl in particular (whom he intended to show here to-day) had a very decided costal hump a few months ago, and now, through the treatment used, has had her back so flattened that he considered it folly to show her and expect you to realize how deformed she had been.

child has a flat back.

Dr. William Le Moyne Wills, Los Angeles.—I am glad to know that the dorsal vertebrae are so different from what I have been taught. As I have been taught, the dorsal vertebrae are nearly circular.

Dr. H. M. Sherman, San Francisco.—I take issue with Dr. Hunkin as regards the dorsal spine. I would remind the doctor that in our children suffering from Pott's disease we have repeatedly seen hyperextension above the seat of the disease.

Dr. J. T. Watkins, San Francisco.—I wish to thank the gentlemen for this very kindly discussion of my paper. In reply to Dr. Pahl, I would say that even an anesthetized patient could not be placed and maintained in the attitudes made possible by this apparatus. No matter how willing and efficient your assistants, they are bound to get tired, and that means that sooner or later they must relax their corrective efforts. The machine, on the other hand, does not get tired, and never relaxes its pull. Again, its pulls and thrusts can be regulated to a nicety. Those of assistants, supposing them capable of exerting all such pulls and thrusts, could not be so regulated. Replying to Dr. Hunkin, I would say that even should his criticisms prove correct, it would not affect the theory upon which I base my principles of treatment. We *know* that when we attempt to bend the spine backward and to one side, the kind of torsion produced in its several segments is the reverse of the torsion obtained by bending it forward and to the side. That much no one questions. Experimentally you have seen here to-day that a straight flexible rod in this case, made of rubber cut so as to simulate the spinal column, acts in the way that we know the column does under like conditions. Upon these unquestioned phenomena I have based the principles of my treatment. Whether my suggestion as to the cause of the phenomena be correct or not, the latter and the deductions from them remain unaffected. Incidentally, I lately put a jacket on a patient of Dr. T. C. McCleave's where there had been, some time

previously, a fracture of the third lumbar vertebrae. This boy presented a hyperextension of the spine throughout the whole dorsal region. I wish to thank the doctor for his commendation of my results. Certain it is that since I have had this machine the results have been incomparably better than any which followed my earlier efforts.

The illustrations are copied from Wullstein's Monograph.

PERSONALS.

Drs. E. A. Dial and Philip S. Chancellor have been elected members of the Santa Barbara County Medical Society.

Dr. J. Henry Barbat and Dr. W. W. Beckett left for the east, about the middle of September, to be gone for some six weeks, visiting the hospitals of Chicago, New York, Boston, etc., and of course going to Rochester, Minn.

Dr. Henry du R. Phelan has returned to California, and located at 11 Van Ness avenue, San Francisco. Dr. Phelan left here in 1898 to enter the Medical Department, United States Army, Philippine service. He left the army in 1903, and went to Paris, where he took a post-graduate course at the Faculté de Médecine. About the first thing Dr. Phelan did upon his return was to re-establish his membership in the County Medical Society.

Professor William Osler, until recently of Johns Hopkins, has been appointed regius professor of medicine at Oxford University, England, and we are advised that King Edward has been graciously pleased to confirm the appointment. Oxford is to be congratulated upon securing a man who is one of the best, if not indeed the best physician, student and exponent of medicine of his time.

The charges of practicing medicine without procuring a state license, preferred by the State Board of Medical Examiners against Drs. James Gerow, L. A. Cloutier and G. W. Winckfield of Oakland, were dismissed, August 24th, for lack of sufficient evidence to convict. "Dr." W. J. Sylvester, San Francisco, convicted of practicing medicine without a license, was fined \$100.—*Journal A. M. A.*

The Canadian Medical Association met at Vancouver, B. C., in the latter part of August, and a number of physicians from California attended the meeting, stopping on their way south to attend the meeting of the Oregon State Medical Association. They report that the Canadian Association meeting was a most complete success, socially; but that, scientifically, the lack of discussion and the somewhat too great length of many of the papers, greatly detracted from the interest of the sessions.

The ignorant quack occasionally victimizes members of the medical profession. One of our members received a package by express, C. O. D., with \$1.00 charges, which he paid and accepted. On opening it he found it contained a bottle of some quack medicine. A day or two later he received the following very curious letter:

"CLINTON, Ia., 3-2-04.

"Dear sir I ship you on the 5th a sample of my remedy it is garnteed to cure the folering hart & kidney lungs & me would like to have yon test it we ship by us express Co this is a free sample yours truly

B. F. MONROE, Clinton, Iowa, No. 231 oak street."

The doctor who was victimized returned the package, with \$1.00 collect, but the gentleman named Monroe refused to accept it, so it was returned. It is certainly a shame that this sort of thing should be permitted, but there seems to be no remedy except to refuse to accept any package, with charges collect unless one knows what it contains.

The much-prayed-for harmony in the state of New York is not immediately to be. It seems that one food organization, a county association, objected to the doing away with an authoritative "code," and in the course of the legal examination it developed that through a technicality, a single objector could block the whole matter. So it is blocked, and nothing can be done for at least one or two years. One is strongly tempted to quote from "Chimmie Fadden," and say "What t'ell!"

The conditioned candidates at the last examination by the state board have all removed their conditions. Four slides were chosen and submitted to several practitioners, who agreed that they were perfectly fair and just examples to be used as tests. Each of the ten conditioned candidates took two slides at random, and was required to state what the subject of each slide was. The specimens were fibromyoma, parenchymatous nephritis, atrophic cirrhosis of the liver and carcinoma of the rectum. Three applicants failed to correctly indicate a single slide; seven answered correctly one slide; no one reported correctly upon both slides. One candidate, a special student of pathology and bacteriology, and who has advertised to the profession exclusive work in pathology and bacteriology, thought that the fibro-myoma was a spindle-celled sarcoma, and the slide of parenchymatous nephritis was diagnosed as adeno sarcoma. It is not easy to say whether this reflects lack of training of the candidate or the little value to be placed upon the microscope alone and unsupported by any clinical data.

A physicians' directory, compiled and published solely for commercial reasons, is bound to be more or less unreliable. Our own Register and Directory may not be absolutely perfect, but it certainly does not contain the names of illegal practitioners, as does a very well-known national directory. Note the following illustrations:

Von Tiedemann, Carl W. W., A. M., Univ. of Stuttgart, Wurtemberg, Germany; B. D. Sc., Ph. G., M. D. (R.), Univ. of Rostock, Mecklenberg-Schwerin, Germany; Pacific Coast Regular Coll. of Med., San Francisco, Cal., 1902; Matriculant, Univ. of California and Univ. of Edinburgh; Dean and Prof. of Surg., West Coast Med. Coll., San Francisco; Former Prof. Surg. Pacific Coast Regular Coll. of Med.; Surg-in-Chief Western Pacific Hosp.; Pres. Med. and Surg. Soc. of the State of California and Appointee of Said Soc. as Mem. State Board of Med. Examiners; 1431 Mission. Tel. Private, South 1180.

Gerino, John B., M. D. (R.), Institute Civico Civile Torino, Italy, 1880; Univ. of Torino, Italy, 1882; German Med. Coll., Chicago, Ill., 1896; Post-Grad. Course Chicago Clinical School, 1899; Pacific Coast Regular Coll. of Med., San Francisco, 1900; specialty Diseases of Women and Venereal Diseases; Hours 8-9 A. M., 2-4 and 7-8 P. M. 2924 Van Ness ave. Tel. Red 2015.

The information concerning Messrs. von Tiedemann and Gerino was furnished by themselves, and at least several of the institutions listed in each case have no existence that we are aware of, save in the minds of these interested gentlemen. Gerino was the star performer in the case brought to the Supreme Court which settled the constitutionality of our state law; we are advised that he has now abandoned the illegal practice of medicine and has taken to the stage for a livelihood. Von Tiedemann has been arrested a number of times, and his trial will soon be heard.

COUNCIL MEETING.

The Council met on September 10th and transacted a good deal of business. Amongst other things, it arranged the councillor districts as follows: 1st, San Diego, Riverside, Orange, San Bernardino; 2nd, Los Angeles, Ventura, Kern; 3rd, Santa Barbara, San Luis Obispo, Monterey; 4th, Fresno, Kings, Tulare,

Merced, Mariposa, Madera, Stanislaus, Tuolumne; 5th, Santa Clara, San Mateo, San Benito, Santa Cruz; 6th, San Francisco; 7th, Alameda, Contra Costa, San Joaquin, Calaveras; 8th, Sacramento, Amador, El Dorado, Alpine, Placer, Nevada, Yuba, Sutter, Sierra, Yolo, Butte, Plumas, Lassen, Inyo, Mono, Glenn, Colusa, Tehama, Shasta, Modoc, Siskiyou; 9th, Marin, Sonoma, Lake, Mendocino, Solano, Napa.

The Council ruled that membership in a homeopathic or eclectic medical society constituted "supporting" sectarian medicine, and that consequently members of such societies could not be eligible for membership in affiliated county medical societies.

Herzstein Lectures; First Series.

Announcement has been made by the University of California of the first series of Herzstein Lectures to be delivered in October by Dr. Alonzo Englebert Taylor, professor of pathology, Medical Department. These lectures have been made possible through the generosity of Dr. M. Herzstein of San Francisco, who has not only given an admirable equipment for the new physiological laboratory, but has endowed this lectureship for the discussion of special problems in scientific medicine. The lectures will be given on Tuesdays and Thursdays in the students' observatory lecture room, and the public, particularly physicians and medical students, will be welcome. The general topic to be discussed by Dr. Taylor will be "Ferments and Fermentations." The program will be as follows: October 4th, "General Considerations; Definition of Types"; October 6th, "Kinetics of Katalysis; Present Application to Fermentations" (of biological order); October 11th, "Fermentation of Poly-Saccharides"; October 13th, "Fermentation of Mono-Saccharides; Alcoholic Fermentation." October 18th, "Fermentation of Protein"; October 20th, "Fermentation of Fats"; October 25th, "On the Chemical Nature of Ferments and the Chemical Nature of Fermentative Accelerations; Specific Fermentation"; October 27th, "Relations of Fermentation to Chemical Metabolism."

[P. S.—Just as the JOURNAL was about to go to press, we received further information regarding these lectures. The series will be given twice on the dates indicated, at 4 P. M., at Berkeley, and at 8 P. M., in San Francisco, at the Hopkins Institute of Art. The lectures are open to the public, and all physicians will be specially welcome. There are some minor changes in the wording of the titles.]

DEATHS.

Dr. Franz H. Coe, of Seattle, Wash., died at his home shortly after the close of the annual meeting of the Washington State Medical Society, July, 1904, at which session he was president of the society. The success of the meeting seems to have been due very largely to the ability and the activity of Dr. Coe, who, though realizing that his life span could be measured by days, kept that knowledge to himself, and did not allow it to dull the pleasure of the members in session. At the meeting of the Oregon State Society in 1903 Dr. Coe cited his own experience with nephritis, and reported that he felt perfectly well since having been operated on by Edebohis. (See JOURNAL, November, 1903, page 375, erroneously credited to Dr. "Henry W." Coe.) Shortly before the meeting of July, this year, Dr. Coe noticed that albumin was present in his urine in considerable quantities; yet he did not in any way abandon his work, preferring to die "in harness." His desire was fulfilled, for, after an operation which he performed at night, he sank into uremic coma in the carriage on his way home, and died a few hours later. Dr. Coe was a good man and a good doctor, and with extreme regret we record his death.

PERNICIOUS MALARIAL FEVER.*

By WILLIAM F. BLAKE, M. D., Santa Barbara.

THIS paper, or more properly clinical report, was suggested by two cases of pernicious malaria which I saw in the service of Dr. J. O. Hirschfelder, while an interne in the City and County Hospital of San Francisco. Before proceeding to the discussion of these cases, I will tax your indulgence by a few prefatory remarks.

Pernicious malaria is a name given to those cases of intermittent, or much more often remittent, fever, which run a particularly virulent course. The progress of the fever may be marked by symptoms either choleraic, hemoglobinuric or comatose, depending entirely upon whether the gastric intestinal tract, the urinary organs or the cerebral tissue becomes marked as the place of invasion and concentration of the parasite. In the cases I am about to report, the plasmodium present was the estivo-autumnal type, and I believe in all these pernicious cases, when a blood examination has been made, that the estivo-autumnal form is universally present, sometimes alone, sometimes accompanied by either the tertian or quartan variety.

The origin of the estivo-autumnal form is a matter of dispute; the majority of hematologists give it a distinctive place, while others assert it is a modification of the one parasite which takes on polymorphic characters, now appearing as the tertiary or the quartan, or again as the estivo-autumnal variety. In all the various clinical manifestations of pernicious malaria, be they choleraic, hemaglobinuric or comatose, the fever has a tendency to lose its paroxysmal character, and to assume a remittent type.

Welch of Johns Hopkins has made the following classification of the types of pernicious malarial fevers:

First—Choleraic or algid type. In this form symptoms of gastro-intestinal derangement are most prominent—nausea, vomiting, dysenteric stools, with blood and mucus, indefinite chills, clammy perspirations—and either moderate temperature or subnormal with collapse; strongly resembles yellow fever. Cases of this kind that have come to autopsy show congestion and thrombosis of vessels of gastro-intestinal mucus membrane, causing necrosis and ulceration.

Second—The hemoglobinuric and hematuric type. Here we have the phenomena of the appearance of albumin and blood in the urine, and either granular, epithelial or blood casts. In favorable cases the paroxysms subside, the urine clears. In other cases the renal congestion may induce uremic coma, with death in coma or from heart exhaustion. In these cases I understand the administration of quinin to be of questionable benefit. In some cases it seems to increase rather than abate the hematuric symptoms. Hare, in his work on therapeutics, says quinin seems capable of developing a hematuria.

Third—The comatose type. It is in this category I have placed the two cases that came under my observation. In typical cases of this variety the patient may be seized at once with delirium or stupor, or perhaps more often, after a few days of severe remittent fever, gradually develop delirium and later profound coma, with high temperature, 105 to 107 degrees. Rapid weak pulse, dilated pupils, Cheyne-Stokes breathing, etc. These cases of the comatose type are generally fatal; but in one of the two cases I am about to narrate there was a more fortunate outcome.

The theories advanced to explain the coma are: First, accumulation of young parasites in the capillaries, which, when they develop, plug up the capillaries, shutting off the blood supply to the brain, thus producing complete coma, in which the patient dies within forty-eight hours; second, emboli of parasites

producing coma, often transient; third, development of toxins in the blood, producing nervous symptoms, often with coma lasting a considerable period of time.

Case 1.—Laborer, age 46. Entered the hospital complaining of chills and fever. Temperature 100.2°. The next morning temperature 99.5°. The patient's mind was clear, and with the assistance of the orderly he walked from one end of the ward to the other, a distance of 100 feet. During the day his temperature gradually rose, and registered 104° by evening. A condition of coma gradually developed, and remained till the end. On Monday morning, after being in the hospital two days, a complete physical examination was made and the following conditions noted: Patient comatose; well developed; well nourished; markedly dyspnoic; somewhat cyanitic; dullness in base of both lungs, with bronchial breathing; numerous rales all over chest; spleen enlarged, palpable; temperature 103.6°; pulse rapid and weak; diagnosis, pneumonia. On examination of fresh specimens of blood there were found intracellular parasites of malaria, with actively moving pigment; also crescents. Not a great many parasites were found, but enough to make the picture plain. The diagnosis was then changed to pneumonia and estivo-autumnal fever, with pernicious symptoms. Energetic treatment failed to benefit this patient's condition, and he died that evening, after being in the hospital sixty hours. Nothing could be learned of this man prior to his admission. A report of the autopsy, made the next day, is as follows:

Skin and conjunctiva yellowish brown discoloration. Cyanose and edema of the pia mater both sides. Hyperemia and edema of brain. Left lower lobe of lung moderately consolidated. Bronchial mucus membrane congested; tubes filled with blood-stained mucus. Posterior part of right lung shows hyperemia, edema and beginning consolidation. Spleen large and soft. Cut surface peculiar dull, slightly brownish-red color. Renal tissue, slight yellowish discoloration. Liver, cut surface dark brown. Bone marrow of tibia, brown discoloration.

In this case the question arises, What part did the pneumonia play, and what the malaria? The microscopical examination of the lung tissue failed to find any localization of parasites there, so it is improbable that malarial organism was directly responsible for the lung condition. The malaria in this case doubtless existed for some time, for crescents do not usually appear in the blood for a week or two after the time of inoculation; therefore, it is possible that the pre-existing malaria so reduced the man's vitality that he was non-resistant to a broncho-pneumonic invasion; and again, it is possible that the coexistence of the pneumonia by lowering the vitality of the body so modified the course of the disease as to make malignant what would ordinarily have been remittent fever.

Pernicious malarial fever in its inception is simply an estivo-autumnal infection, the same as occurs in the mild remittent type so commonly seen where malaria is present. Why some infections remain benign and some become malignant is not known, but diminished bodily resistance, due to previous malarial infection, overwork, excesses or debility from whatever cause, are probably influential factors in determining the course of any estivo-autumnal infection.

The peculiar features of the case are: First—The patient entered the hospital in fairly good condition, but before the end of twenty-four hours his temperature rose four degrees, and coma, with death, intervened within another thirty-six hours. Second—The autopsy and microscopical findings showed that a migration of parasites to the brain had taken place. Third—The absence of parasites in any number in the spleen and bone marrow.

In Vol. VI, No. 2, of the *Journal of Experimental Medicine*, for 1902, there is a report of some fifteen cases of pernicious malaria.

In this report the author dwells particularly on the fact that the estivo-autumnal form seems to have some predilection for the internal organs, the parasites develop in great numbers there without appearing to any extent in the peripheral circulation. Also, that the parasites seem to have some selective ability or power of migration and concentration. Necropsy reports of fatal cases show in some instances an invasion of renal tissue; in others the gastro-intestinal tract. And again the brain tissue, the spleen or the marrow of the long bones may be singled out as points of concentration and most rapid development.

Case 2.—Young Italian, age 29. Family and childhood history good. Seven and nine years before he had rheumatism, typhoid and syphilis. No history of sec-

*Read before the Santa Barbara County Medical Society.

ondaries. He denies any sickness during the past few years. Had visited Manila twice while in the Government transport service a year and a half ago. For a few months prior to entering the hospital he had worked on the river boats between San Francisco and Stockton. Present illness began five days ago, with pain in the stomach and abdomen, after an alcoholic excess. Patient was nauseated, but did not vomit; no bowel movement for five days. Physical examination showed all the organs apparently normal, with the exception of the spleen, which was enlarged and hard to the touch, and plainly felt at the margin of ribs. Liver measured 12½ centimeters, and was palpable below margin of ribs. Patient unable to stand without support, with eyes either open or shut. Patient's mental condition considerably impaired; he has a dazed appearance, slow speech and almost complete incoherence. Temperature 99.2°. Examination of peripheral blood showed much pigment, numerous pigmented leukocytes, but very few crescents. The diagnosis was made of estivo-autumnal malarial fever, with pernicious symptoms.

Energetic treatment was at once begun. The bowels were thoroughly opened, and ten grains of quinin muriate hypodermatically every three hours, and ten grains of quinin sulphate three times a day by mouth, were given him. The next day his condition was the same; the highest temperature 99.4°. Third day, still no improvement; highest temperature 100.6°. The fourth day the patient began to improve; highest temperature 99.8°, lowest 96.6°. His speech became less stuttering, and his countenance brighter. He was able to rise and stand alone. On the eighth day after entering the hospital the hypodermatic administration of quinin was discontinued. By this time his mind was perfectly clear, color of countenance much improved; he complained of hunger, and wished to leave the hospital. Examination of blood on this day showed very little free pigment, very few pigmented leukocytes and no parasites. On the tenth day the patient was able to be up and around; spleen no longer palpable; mind clear, and speech not impeded. An examination of the blood was made, and no parasites found. Two drams of ergot were then administered, and several hours later a second examination of blood was made, and pigmented leukocytes, free pigment and crescentic parasites were found without difficulty. The administration of quinin was continued for two days, at the end of which time the man was discharged.

An interesting fact in this case was that the temperature at no time reached as high as 101°, notwithstanding the virulence and persistence of the infection. Some of the interesting points illustrated by these two cases are:

First—The selective ability of the parasites and their power to migrate and mass themselves in particular parts of the body. This is shown in the slides made from the tissues of the first patient, in which the parasites were found in the brain tissue almost to the exclusion of the other parts of the body.

Second—The phenomena of the development of the parasites in the internal organs and their absence from the peripheral circulation. Also the effect of ergot, which seemed to cause the parasites to leave the internal organs and to appear in the cutaneous circulation.

Third—The necessity in these pernicious cases of energetic treatment; that is, the hypodermatic administration of quinin. It is plain to see that in the choleraic form with the accompanying profound gastro-intestinal derangement, that if the drug were given by mouth it would pass through the body unabsorbed.

Fourth—That as the temperature range may become remittent in type, and as the ordinary therapeutic test of the disease, the administration of quinin by mouth may fail, the only sure diagnostic test of the presence of malaria is by a thorough and persistent examination of the blood.

RESOLUTIONS ON NOSTRUMS.

The American Medical Editors' Association, at its last meeting, passed the following resolutions. One cannot but wonder whether any of those present appreciated the humor of the situation!

"Whereas, The public is, and long has been, suffering from the use of nostrums, and from the misuses of medicines; and

"Whereas, The medical profession and press have

endeavored by every means in their power to instruct the laity upon the subject; and

"Whereas, Some journalists either do not understand the true situation, or find it to their pecuniary gain to favor the use of nostrums and pander to the greed of their manufacturers at the expense of the health, or even the lives, of their dupes among the people; and

"Whereas, The eminent editor of the *Ladies' Home Journal*, Mr. Edward Bok, in an able and vigorous editorial on page 18 of the May number of that journal, laid the truth of the matter before his readers, thus aiding in the work of warning and educating and conserving the health and welfare of the public; be it

"Resolved, That the American Medical Editors' Association approves and commends Mr. Bok for the intelligent, honest, fearless and well-grounded position he has taken, which has been thoroughly appreciated by us and by the medical profession generally;

"Resolved, That a copy of these resolutions be spread upon the minutes of this meeting, be transmitted to Mr. Bok, and be published in the medical journals throughout the country."

ALCOHOL AND NARCOTICS.

To the Editor of the STATE JOURNAL: The American Medical Society for the Study of Alcohol and Other Narcotics was organized June 8, 1904, by the union of the American Association for the Study of Inebriety and the Medical Temperance Association. Both of these societies are composed of physicians interested in the study and treatment of inebriety and the physiological nature and action of alcohol and narcotics in health and disease. The first society was organized in 1870, and has published five volumes of transactions and twenty-seven yearly volumes of the *Quarterly Journal of Inebriety*, the organ of its association. The second society began in 1891, and has issued three volumes of transactions, and for seven years published a *Quarterly Bulletin*, containing the papers read at its meetings. The special object of the union of the two societies is to create greater interest among physicians to study one of the greatest evils of modern times. Its plan of work is to encourage and promote more exact scientific studies of the nature and effects of alcohol in health and disease, particularly of its etiological, physiological and therapeutic relations. Second, to secure more accurate investigations of the diseases associated or following from the use of alcohol and narcotics. Third, to correct the present empirical treatment of these diseases by secret drugs and so-called specifics, and to secure legislation prohibiting the sale of nostrums claiming to be absolute cures, containing dangerous poisons. Fourth, to encourage special legislation for the care, control and medical treatment of spirit and drug takers. The alcoholic problem and the diseases which center and spring from it are becoming more prominent, and its medical and hygienic importance have assumed such proportions that physicians everywhere are called on for advice and counsel. Public sentiment is turning to medical men for authoritative facts and conclusions to enable them to realize the causes, means of prevention and cure for this evil. This new society comes to meet this want by enlisting medical men as members and stimulating new studies and researches from a broader and more scientific point of view. As a medical and hygienic topic the alcoholic problem has an intense personal interest, not only to every physician, but to the public generally in every town and city in the country. For this purpose a most urgent appeal is made to all physicians to assist in making this society the medium and authority for the scientific study of the subject. The secretary, Dr. T. D. Crothers, of Hartford, Conn., will be pleased to give any further information.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale.....	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate.....	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate....	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid.....	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Calcium beta-naphthol sulphonate	{ Abrastol Asaprol
Creosote Tannate.....	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other similar names.)
† Epinephrin	{ Adnephrin Adrenalin Adrenamine Adrenol Adrin Caprenalin Hemisine Hemostatin Suprarenalin
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine...	{ Aminoform Ammonio-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
" , anhydromethylen citrate..	{ Helmitol
Levulose	{ Diabetin Fructose Fruit Sugar

Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin....	{ *Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	{ Dulcin Sucrol
Phenyl-dimethyl-parazon .. (Germ. Pharm.)	{ Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazolon Sedatin
Phenylacetamide.....	{ Acetanilid Antifebrin (And several hundreds of trade names for headache powders, etc.)
Phenylmethyl-ketone.....	{ Acetophenone Hypnone
Plant pepsin.....	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of quinine.....	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-cafeate.....	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration.....	{ Iodothyrene Thyroidin
Trioxymethylen.....	{ Paraformaldehyde Paraform Triformol
Abrin = Jequiritin	
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Alsol	
Australian oil Eucalyptus = Fluco!	
Bismuth chrysophanat = Dermal	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphol	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1% solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Dimethyl-xanthine = Theobromine	
Guaiacol carbonate = Duotal	
Laricinic Acid = Agaricin	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garanotose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloroacetic acid, 50% solution = Acetocaustic	

* Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, 1903, page 178.

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All Scientific Papers submitted for Publication must be Typewritten.
Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

NOVEMBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

On September 30th Dr. W. A. Whitlock, of Merced, was called as a witness in the superior court to give evidence in a case there pending. He gave all of the general evidence asked, but when the attorney for the defendant asked for expert evidence relating to certain facts about a gunshot wound, Dr. Whitlock refused to answer, on the ground that such testimony was expert evidence, and that the witness should receive proper compensation for his time. The court adjudged him in contempt, and sent him to jail, as he persisted in refusing to answer the questions. Later the district attorney visited him in jail and agreed to approve his claim for \$50.00 if he would consent to testify. This he did, and was released. Dr. Whitlock says: "I went to jail to protect the rights of the profession, and would have been there yet if the district attorney had not come to my terms." Certainly, if the facts as reported to the JOURNAL are correct, and we have no reason to doubt them, the physicians of this state are indebted to Dr. Whitlock for his courage in sticking up for his rights and the rights of every expert witness.

In September the oldest medical society in the United States—the Medical Society of New Jersey—commenced publishing its transactions in the shape of a monthly journal, with the title *The Journal of the Medical Society of New Jersey*. Dr. Richard C. Newton, of Montclair, is the editor, and Drs. W. J. Chandler, D. C. English and H. W. Elmer are the members of the publication committee. The appearance, make-up and contents are excellent, and there seems little doubt that the journal will succeed under the able editorial guidance of Dr. Newton. The policy announced by the journal is one of clean and decent advertising, and the chairman of the publication committee writes us that he will do all in his power to see that the advertising pages are kept clean. Too many state society journals have followed the pernicious example of the *Journal of the A. M. A.*, and have accepted pretty much anything offered. We sincerely trust that New Jersey will stick to the policy announced, and keep its self-respect. The society was founded on July 23d, 1766, and has a long and honorable record. We wish the newest state society journal every success, and particularly that it may keep from the unenviable advertising entanglements that the trustees have let the *Journal of the A. M. A.* get into.

In all human probability we have seen the last of the so-called "Chamley case." After dragging its weary way through the courts since August, 1903, decision has **LICENSE REVOKED.** finally been handed down and recorded. The certificate of Dr. S. R. Chamley was revoked by the Board of Examiners at a meeting held August 4th, 1903, under authorization of the act creating the board. There were present at this meeting Drs. Tait, Osborne, Buell, Perce, Thorne, Buteau and Gere, and all voted in favor of the action taken. The action against Dr. Chamley was initiated by Mr. J. M. Nevin, and was based on that portion of the state law printed on page 202 of the sixteenth edition of the Register: "Fourth—All advertising of medical business in which grossly improbable statements are made." Dr. Chamley's advertising statements were certainly "grossly exaggerated," and it is not improbable that he was responsible for the death of a number of unfortunate persons who fell into his hands. In the evidence before the examiners at the session when his certificate was revoked, one witness stated that the death of Mrs. Nevin was probably due to his improper treatment, and that Mr. Nevin suffered a great shock at his wife's death, and that he died very shortly thereafter. The formal complaint in the case cited an advertisement appearing at that time in the *Examiner*, reading: "I will give \$1,000 if I fail to cure any cancer or tumor. . . . A hard lump on the lip, face, or anywhere, is cancer. . . . Any lump in a woman's breast

is cancer." That sort of thing is not only gross exaggeration, but it is well calculated to produce an immense amount of harm. It is highly improbable that the supreme court will be called upon to again pass upon any phase of the medical law. While it is true that this particular portion of the law was not considered in the now celebrated case, *ex-parte Gerino*, still the general provisions of the act were so fully passed upon in that decision that the matter is practically a closed incident. The board is to be congratulated upon its action and upon the result of its labors. There are other holders of certificates who should be dealt with, and it is to be hoped that members knowing of such cases will file charges before the board. The board cannot originate complaints, but it will be very glad to receive them.

Niels R. Finsen died in Copenhagen, Denmark, on September 24th. For fifteen years he had worked carefully, scientifically and conscientiously, in the field of phototherapy, and his results have been brilliant. Seldom, in the practical application of medicine, do we see the methods of exact scientific research brought into active play; yet accuracy of just this sort characterized all of Finsen's work, and his reports are almost above criticism. In 1903 he was voted the Nobel prize, and turned the money over to the Finsen Institute. His personal, as well as his professional life is reported to have been such as to serve as a practical lesson in honesty and uprightness in scientific work as in every-day life.

We are advised by the Pacific Mutual Life Insurance Company that Diddle was never appointed an examiner for that company, and that he has made but six examinations altogether for it. These were accepted for the reason that it did not know he was an unlicensed physician, and for the further reason that there was no other physician in the community. Excellent recommendations are filed with the company, commending Diddle highly, and it probably did not occur to anyone to see whether he had a license. We would respectfully urge upon all life insurance companies the necessity for doing something more than merely getting a couple of references; they should make sure that the applicant is licensed. Through an unfortunate phraseology of the editorial in question, the inference might be drawn that this company paid less than the regular \$5.00 fee for examinations. This is not the case. The medical director of the company, an ex-president of the State Society, no less a person than the State Society's good friend Dr. Chumess, has for years been on record as highly approving the minimum fee of \$5.00 for all examinations.

Last month the JOURNAL referred to the case against one "Dr." Perhaes, in Tuolumne county.

ANOTHER CONVICTION. We are very glad to be able to report that on the 13th of October Perhaes came into court and asked to change his plea from "not guilty" to "guilty." This the court allowed, and the defendant then asked that he be sentenced immediately. In accord with his request, the minimum fine of \$100.00 was assessed, which he paid at once. Dr. W. H. Roberts did excellent work in securing the evidence for this conviction and in pushing it to the end. He is to be congratulated.

Elsewhere in the JOURNAL is a letter asking information as to the attitude which the physician should assume toward the non-medical person who uses X-ray or electrical apparatus in the treatment of patients for doctors. The JOURNAL has also received a circular signed by a Mrs. H. M. Ames, Jr., San Francisco, setting forth the fact that she is prepared to treat patients by the Finsen light apparatus, and offering to pay to physicians a commission of \$1.00 per treatment for each patient referred to her. The opinion of practically all reputable physicians is that such conduct, among physicians particularly, is decidedly reprehensible. The physician should charge the patient what he thinks right and proper, but should not be a party to a scheme for getting more money out of him by the "commission" process. The question is a new one, and should receive the attention and discussion of the medical profession.

Oakland is in grave danger of obtaining decidedly undesirable distinction, not to say notoriety, as an anachronous community. For the opening years of the twentieth century to see enacted or permitted an upsetting of the wise rule of compulsory vaccination of school children is, to put it very mildly, peculiar. It would be a waste of good paper and ink to point out the value of regular and compulsory vaccination requirements. The physicians of Alameda county, and of Oakland especially, should ponder upon the possible result of allowing the anti-vaccination craze to live and grow. Less somnolent parts of the state will certainly object to unchecked travel, in the event that smallpox appears in Oakland, and that beautiful city will then find itself—quarantined. This would be both awkward and unpleasant, and the only consolation that could be offered would be to send them some of the "hints" fathered by the San Francisco Board of Health for the benefit of "the families of infectious, contagious and communicable diseases." Wake up!

This number of the JOURNAL will reach you just before election. If you, or your county society, have not asked your nominees for the state legislature to express themselves regarding their attitude toward the medical law, do so at once. Before election is the time to find out how a man stands; then you can vote accordingly. Some weeks ago the secretary of the State Homeopathic Society joined with the secretary of your society in sending out a circular letter to some 125 nominees (all we could get the addresses of at the time), stating that the law was satisfactory to the societies and to more than two-thirds of all physicians in the state, and asking that it be left strictly alone. Fifteen replies have been received, from the following nominees: W. H. Wickersham, Henry W. Lynch, J. C. Coyle, T. E. Atkinson, Frank R. Devlin, F. A. Duryea, N. K. Foster, G. R. Lukens, H. S. Y. McCadney, C. M. Drew, John A. Goodrich, Edward F. Treadwell, J. Clem Bates, J. J. Burke, William H. Waste. There has been some gratuitous legal advice handed in with this correspondence, but practically these gentlemen have stated that they will stand for the law as it is. In Santa Cruz, Monterey, Sacramento and Santa Clara counties the nominees have been interviewed and the attitude of the profession very plainly expressed to them; their medical constituents are watching them, and will not forget how they act. Similar action should be taken in every county in the state. There seems little doubt that the Eddyites, the faith-curers, the quacks and, unfortunately to relate, some otherwise apparently respectable physicians, have combined in the getting together of "a sack," with the object of emasculating the present good law. Watch your nominees, and let them know before election how you stand, and how you want them to stand. Beware of the silent man.

The manufacturers of urisepin, who kindly furnished us with a fake formula, have been for some time past flooding this part of the country with circulars that would be intensely funny were it not that they undoubtedly impose on a number of physicians. The circular gives some wonderful "tests" for lithium and formalin, which really are no tests at all. The argument is about as rational as one suggested by a chemist when he saw one of the circulars. "We make bicarbonat of mucillage. True, chemists say there is no such thing, but we know better. Prove it for yourself. Drop some acid on our preparation and see it effervesce; that proves it is bicarbonat. Now take a dose and then lick a postage stamp; if it sticks, that proves it is mucillage and we are vindicated; the chemists are all wrong. We do make bicarbonat of mucillage." How long are we going to stand such idiotic rot as this?

Dr. Shrady has relinquished the editorial control of the *Medical Record*, after holding it for more than forty years, and Dr. Koenig has resigned his position as editor and publisher of the *Pennsylvania Medical Journal*.

Much has been said in the medical press about Dr. Shrady and his retirement. He started the *Record*, and it has been his hand that has built it year by year; his brain has guided its career from the littleness of beginning to the bigness of its present position. He leaves the editorial field with the hearty good wishes of every medical man who knows either the *Record* or the man who has made the *Record*. Of Dr. Koenig scarcely a paragraph has been printed, though his work was, if anything, greater than Dr. Shrady's. Seven years ago he undertook to do what no one believed could be done: the publication of an absolutely clean and ethical medical journal that should be entirely free from all question of commercial control. He started the first State Society Journal, and for seven years edited and published the only medical journal ever published in this country which has never contained one line of questionable advertising. Thus his example has been in two directions, and enormously valuable. He demonstrated that a state society could successfully publish its transactions in journal form, and he also showed in no questionable manner that such a journal can be absolutely clean and independent. The work of Dr. Koenig has been no less important, if indeed time will not show it to have been immensely more valuable, than that of Dr. Shrady. Every self-respecting physician in this country who possesses a healthy understanding of medical ethics, written and unwritten, owes a debt of gratitude to Dr. Koenig that he can never sufficiently pay.

Motion is one of the fundamental laws of the universe; nature seems to abhor rest. We seldom see anything remain for long perfectly quiet and unchanging. And so, largely, it is with human nature; we either progress or retrogress; we do not, for long, remain in *statu quo*. Things, conditions, movements, what you will, take to themselves small beginnings and slowly grow; we become aware of them, but are tolerant; they increase, and we notice them; they wax great, and if they are evils, we bear with them; they wax greater and become more pestiferous evils, and then comes a reaction. We no longer tolerate them with a shrug of the shoulder; we no longer writhe impotently; we no longer exclaim, "But what can one do?"—we get up and exhibit the law of nature—motion. Such a cycle has been, since a time when the memory of man runneth not to the contrary, likened to the swing of the pendulum. Has the nostrum evil within the medical profession reached its limit, and is the reaction about to set

in? These are grave questions, but from the letters that come to us from all over the country, from almost every state in the union, commending the JOURNAL for its outspoken attitude and praising the society for having the courage of its convictions and for pointing out rottenness where it exists, we are led to hope that a change may possibly occur. For years every right-thinking man in the country has known that the advertising pages of the *Journal of the A. M. A.* were worse than rotten; yet no one cared to speak the first energetic word. Your society has done so, however, and the ball has started rolling. Note the result: The *Journal of the A. M. A.* has adopted, in slight measure, our rule in regard to printing the formula of a proprietary medicine with the advertisement. They do not make any acknowledgment for the suggestion, and we do not ask it; we only ask that it be done. If it can be done in three or four instances it can be done in each and every case. Do not falter, you gentlemen of the trustees; keep at the good work. Take as your instructions from the Association that portion of its Principles of Ethics which says that "It is equally derogatory to professional character for physicians to dispense or promote the use of secret remedies." And please remember that a mere qualitative formula, such as that you are printing with the advertisement of Mey's poultice, will not answer; the physician should know *how much of what*, he is using.

It is really astonishing how easy the practice of medicine has been made, of recent years, by the ever-ready, ever-watchful, ever-helpful manufacturer of **MEDICINE MADE EASY.** ready-to-take medicine! Suppose a patient comes to you with a bad burn. You do not need to devote any particular time to studying the case, nor to ascertaining the special character of the burn. Just turn to your medical journals and glance through the advertising pages. You find: "Fire burns, sun burns, burns by gasoline, cuts and sores, wounds galore, are healed by Unguentine." What more do you want? Just slap on "unguentine" (whatever it may be; you do not know, but that does not matter; the kindly disposed manufacturer tells you to) in liberal quantities, collect your fee (this is necessary, for the "unguentine" must be paid for) and let the patient go. Suppose the patient has chronic constipation. Again turn over the pages of your journals (of course we mean the advertising pages)—or if you do not feel that you can afford a liberal education by taking several journals, take one, and study the advertising pages of the *Journal of the American Medical Association*. Here you find exactly what the patient wants: "Lapactic pills, the 20th century conqueror of chronic constipation." Do not be so foolishly impertinent as to ask or to want to know what the patient will be taking if you give him "lapactic pills"; just do what you are told. Perhaps his

constipation may come from some cause that needs your prompt and skillful attention in other ways; but take the chance and practice "medicine made easy, or the doctor's friend." Carefully preserve the advertising pages of the journal for a year and you will have a ready-reference library that will instruct you at once and authoritatively as to exactly what to give in any case. The patient will probably take a good deal of the same stuff under different names and without your knowing it, but that does not matter; each kind is the best.

PURE FOOD AND DRUG BUREAU.

The postponement of national systematic drug analyses by the House of Delegates of the American Medical Association is, under the circumstances, a wise movement. The difficulties in any practical execution of the task seem at present insuperable. Perhaps, after all, the existing agencies, if properly and adequately utilized, are enough to bring about the reform in a slow and more certain manner than by any complex and official organization. While such widespread and powerful interests exist against thoroughgoing reform, and while even chemists in one way or another may still be bribable, there must be recognized great dangers in carrying out the absolutely exact analyses and complete publication of the results. Any plan that gives only the analyses of the good and really "patent" products while remaining silent as to fraudulent and secret ones, cannot command much following or bring about revolutionary changes. One of the essential conditions of progress seems to be the enactment of the Hepburn Pure Food Bill by Congress, and to this end physicians should give every aid in their power. Why should not Drs. Ellis, Jones and others establish their bureau without the sanction and support of the American Medical Association and the American Pharmaceutical Association, and give the professions the benefit of its workings? In the meantime there is a vast deal of practical reform possible, based upon the reports of the published analyses of State Boards of Health and of the United States Department of Agriculture.—*American Medicine*.

Does Dr. Gould intend to imply that the chemists of a bureau run without the sanction and support of the American Medical Association and the American Pharmaceutical Association, by "Drs. Ellis, Jones and others" would be less subject to corruption—less bribable—than the chemists of a bureau established and directed by the House of Delegates of the American Medical Association? The imputation on the latter is a grave one.—*Am. Med. Journalist*.

[Indeed it is, especially when it is remembered that several members of the House of Delegates expressed, as the reason for opposing the plan, the opinion that unscrupulous manufacturers would soon own the whole A. M. A.! As a matter of fact, it was the agent of one manufacturer who, somehow, was a delegate, and did most of the talking against the plan proposed. He also admitted that he knew nothing about it.—Ed.]

The Blind Boycotted.—The *Medical Times* arraigns the San Francisco labor unions for putting a boycott on brooms made at the blind asylum in Alameda county. It says: "Labor unions have, from time to time, done many a thing to indicate a reversion to complete savagery and most brutal animalism, but it is certain that there is no word in any existing dictionary sufficiently forcible to characterize the attitude of the labor unions of San Francisco."

COMMUNICATION.

THE A. M. A. FINANCIAL STATEMENT AGAIN.

To the Editor of the STATE JOURNAL: The marked copy of your JOURNAL received. I suppose you send to me as chairman of Board of Trustees expecting a reply to what you would term your open letter. You wish to know what we are going to do with the *Journal of the A. M. A.* To answer that question briefly: We hope to continue to keep it, as we now believe it to be, the leading medical journal of these United States—the peer of any in the world.

To keep it there, the questions of dollars will have to be one of the considerations, as it is of all successful business enterprises. Had you carefully read the report, or even been generous enough to your subscribers to have printed it in full, there would have been no need of your editorial. The report speaks for itself. You correctly state the net profit of the business of the *Journal*. Had you copied from the report the amount received from advertising you could have placed before your readers the fact that the *Journal* received last year from advertisements \$88,533.65. Had you given your readers fairly all the sources of income of the *Journal* they could easily have answered the conundrum which you thought you were propounding. With a profit of \$38,000.00 and an income of \$88,000.00 from advertising (using round numbers) where would the *Journal* have been without the advertisements? The answer is (for fear you will not give it to your readers) \$50,000.00 on the debit side of the ledger.

I am surprised that you will attempt to make your readers believe that the "dues" is no part of the *Journal* income. You do not appear to be aware of the fact that the \$63,237.48 entered as membership dues is the amount paid by members of the association as subscribers to the *Journal*, receiving the *Journal* by virtue of paying their membership fees of \$5.00 each year and that for 1903 the above amount of \$63,237.48 was collected.

There was in an old copy of logic once in my possession the following specimen of a syllogism: "Light dispels darkness; feathers are light; therefore feathers dispel darkness." Your reasoning could be thus placed: "Good advertising mediums for proprietary medicines make money; the *Journal of the A. M. A.* makes money as at present managed; therefore the *Journal of the A. M. A.* is a good advertising medium for proprietary medicines."

But to come down to the question at issue about the *Journal* being used for the sake of the getting of "filthy lucre" as the "greatest advertising medium for proprietary medicines in this country." The writer of the editorial certainly does not know, or if he does know, wishes to produce the impression upon the minds of his readers to the contrary, that the advertisement of no internal proprietary medicine is permitted in the *Journal's* pages, which is not accompanied by a verified statement of all the ingredients entering into its composition and that this formula is published at least once in connection with the ad.; generally several times. The minutes of the meeting of the Board of Trustees show that the same order has been issued, and the same stand taken in regard to external remedies in future.

A report was made to the House of Delegates showing that more than \$8,000.00 of advertising had been rejected for the year 1903 because the ads were unethical, or advertised directly to the laity (*Journal A. M. A.* June 18, 1904, pp. 1639). The same can be said of the report of last year (see page 1311, *Journal* May 9, '03). You should have been fair enough to have copied from the written report of the trustees the following, which relates to advertisements (see page 1636): "During the past year (1903) the *Journal* has been more strict regarding accepting advertisements, and a large number of

advertisements carried by other medical weeklies have been declared unacceptable to its pages. Most of them have been declared unacceptable for the reason that they were considered secret proprietaries. A few, however, were rejected because they advertised directly to the laity."

To show that the policy of the Board of Trustees has redounded to the general good of the *Journal*, it is only necessary to compare the now *Journal* with that issued in 1898 and to compare its financial condition at the end of the fiscal year Dec. 31, 1897, as shown on page 1310, *Journal A. M. A.*, May 9, 1903 (or going back to the original report of the Board of Trustees read by the venerable, and beloved Dr. A. Garcelon at Denver, June 25, 1898, page 1532, *Journal A. M. A.*).

At that time the Association owned a few presses and other machines, together with a little office furniture, and was doing business in a hired house. The total *Journal* business, including cash on hand, in 1898 was \$47,140.07. The condition of the *Journal* as shown by balance sheet of June 30, 1904, is as follows: Real estate, including *Journal* office and five residences on the block of ground owned by the Association, \$94,747.11; machinery, furniture and fixtures, \$34,764.68; bonds, \$40,199.38; library, \$1,000.00; about \$26,000 in cash in treasury and *Journal* office; total, \$196,711.17—not taking into consideration any accounts due the Association, etc., showing in round numbers a net gain of \$150,000.00 since the Denver meeting.

The Association has its own *Journal* office; its machinery; and is so situated as to enlarge the plant as the growth of the Association and its publishing interest may demand. The section reprints are published and bound in the *Journal* office. This tells what has been done with dollars, dirty and clean, that have been earned by the *Journal* from subscriptions, dues, and advertisements. Your Board of Trustees thinks this money has been well used; the House of Delegates appears to have thought so too. We reported to the House of Delegates in Atlantic City in June, 1904, that \$40,000.00 of the desired \$150,000.00 reserve or surplus fund had already been provided and invested in 4 per cent interest-bearing securities and suggested that this \$150,000.00 reserve fund should be set aside "before any change should be made in its fiscal policy." This fund should not be laid up at the expense of the *Journal*, that is by curtailing it in any way, but by avoiding extravagant, and for the present, injudicious expenditures of money. (See *Journal A. M. A.*, June 18, '04, bottom page 1658 and top page 1659.) As the *Journal* gets to be stronger financially it will be able to strike out every advertisement about which any question could be raised by the most extremely ethical faddist.

Having criticized the board in your JOURNAL, as chairman of the board I feel that this reply to your open letter should be printed in your JOURNAL and further that you should give your readers the benefit of a complete publication in an early issue of your JOURNAL of the entire report.

Respectfully,

T. J. HAPPEL,

Chairman Board of Trustees.

[We take pleasure in publishing the above letter from Dr. Happel. It is hardly possible to give space to the entire report of the trustees, but below will be found the principal part of the financial statement. It would appear from the above letter that membership in the Association is regarded as a sort of premium poster attached to the *Journal*. The dues are just that and would exist if the *Journal* did not; hence it is not fair to credit them bodily to the *Journal* income. In regard to the advertising question, if Dr. Happel will kindly have the *Journal* pub-

lish a statement setting forth just when and where, in its pages, it printed the full quantitative formula, covering all of the active ingredients of the following preparations, we will be very glad indeed to make any sort of an apology he or any other member of the board may desire: Panopeptone, chionia, benolgur, uriform, unguentine, cactina, seng, Kntnow's powder, pepto-mangan, Gray's tonic, listerino, uriseptin, ergoapiol, Mey's poultice, tongaline, somatose, aseptinol, chiolin, Colden's liquid beef tonic, hemaboloids, triferrol, arsenauero, gonosan.

It would also be interesting to know whether the formula of uriseptin filed with the editor is the same formula which the concern formerly printed with their advertisement; if so, it is a lie, and the editor has been more than once advised of that fact.

The portions of the above letter emphasized are those which bear directly upon the advertising question. Anyone who desires may figure out the financial matters from the following reprint.—Ed.]

EXHIBIT "A."

Revenue account for the year ending Dec. 31, 1903.

Subscriptions collected during year.....	\$52,567.38
Membership dues.....	63,237.48
Advertisements.....	88,533.65
Jobbing.....	8,669.11
Books.....	2,395.32
Rents of Association properties.....	2,185.00
Buttons.....	567.75
Miscellaneous sales.....	146.83
Interest on bonds.....	560.00
Inventory of paper, type and metal Dec. 31, 1903.....	5,562.00

\$224,424.52

Publication Expenses—

Paper.....	\$52,720.70
Ink.....	2,055.95
Type, metal and electros.....	3,488.94
Salaries and pay rolls.....	57,067.34
News, reporting, etc.....	6,628.17
Binding.....	309.21
Machinery, repairs and renewals.....	1,228.19
Advertising and subscription commissions.....	8,258.72
Postage, first and second class.....	15,330.96
Power, fuel and light.....	3,049.07
General expense.....	2,921.21
Exchange.....	279.99
Collection fees.....	1,633.12
Discount.....	1,694.55
Factory supplies.....	832.31
Office jobbing.....	1,888.00
Transportation.....	1,385.28
Express and cartage.....	916.34
Bad debts less recoveries.....	1,642.76
Depreciation of machinery and furniture and fixtures.....	3,798.33

\$166,529.13

General Expenses—

Organization expense.....	\$5,323.19
Association expense.....	6,629.80
Auditing accounts.....	175.00
Miscellaneous expense.....	783.40
Building expense.....	525.71
Buttons.....	808.85
Insurance and taxes.....	1,257.01
Depreciation of buildings.....	4,290.37

\$19,793.33

Net revenue for the year ending Dec. 31, 1903.....

38,102.06

\$224,424.52

EXHIBIT "B."

Balance Sheet—Dec. 31, 1903

Assets.			
Real estate and buildings.....		\$96,163.71	
Machinery.....		30,703.70	
Furniture and fixtures.....		3,481.10	
Library (estimated).....		1,000.00	
Inventories of type, metal and paper stock.....		5,562.00	
Bonds (par value \$11,000.00).....		15,168.13	
Bills receivable.....		\$1,172.32	
Accounts receivable.....	\$41,008.39		
Less reserve for unearned advertising.....	31,206.92	9,801.47	
Cash on hand in bank.....		10,973.79	
		6,147.35	
		\$169,199.78	

Liabilities.

Accounts payable.....		\$154.63
Sectional reports paid in advance.....		455.00
Surplus.....		
Balance as at Jan. 1, 1903.....	\$127,980.17	
Add:		
Inventory of books, furniture and fixtures not previously taken into account.....	1,121.00	
Profit on machinery sold during the year.....	1,386.62	
Net revenue for the year, as per account annexed.....	38,102.06	168,590.15
		\$169,199.78

EXHIBIT "C."

Disposition of surplus for the year ending Dec. 31, 1903.

Increase in Assets—

Real estate and buildings.....	\$14,952.77
Machinery.....	13,529.30
Furniture and fixtures.....	1,129.40
Library.....	1,000.00
Inventories of type, metal and paper stock.....	3,154.33
Decrease in accounts payable.....	9,895.01

\$43,660.81

Decrease in Assets—

Bills and accounts receivable.....	\$2,775.97
Cash.....	275.19

3,051.16

Surplus for the year.....

\$40,609.68

SUGGESTION REGARDING CLINICAL MATERIAL.

To the Editor of the STATE JOURNAL: I wish to call your attention to what seems to me the lamentable dereliction of duty by the profession of San Francisco.

In this city is a vast amount of clinical material with facilities for demonstration that are unequaled west of Chicago. So far as I am able to judge, there is no reason why San Francisco should not be a resort for clinical study, if those who have material at their disposal would afford opportunities for investigation. Judging from opinions expressed by medical men who have visited the city, and from the actions of those who have the chance to make this a clinical center, it would seem that most of the men whose province and privilege it is to teach, desire to hide their work, or are ashamed to make it public.

In any city in the east, all clinics given, either medical or surgical, are bulletined so that medical men can select, some days ahead, the work they wish to see. There is no reason why this should not be the course pursued here, unless the work done is of such a character that publicity is not advisable. All of the profession holding either public or private clinics ought to give visiting or resident physicians, and students of the various colleges in the city, an opportunity to see and to hear them. To accomplish that purpose, either the County Medical Society, the State Medical Society, or whatever organization seems best, should furnish facilities, to those that wish to do so, to post notices a few days ahead, that all who desire to avail themselves of the privileges offered, may take advantage of the opportunity. This will apply particularly to the various hospitals, but does not bar members of the profession, not connected with them, who have interesting work that they may wish to demonstrate.

The office of the CALIFORNIA STATE MEDICAL JOURNAL, or the library of the County Medical Society, being convenient and centrally located, would be the proper place for such a bulletin board. The notice of a clinic could be sent by mail and posted at least twenty-four hours before the clinic is to be held. All of the profession know the convenience and the value of such information. San Francisco is, and should be, the center for medical training of the west.

GEORGE GOODFELLOW.

[The suggestion made by Dr. Goodfellow in the foregoing letter seems to be a most excellent one. There is certainly a great deal of work being done in this city which should be of more value than it is. Not a week goes by but that some doctor from out of the city comes into the JOURNAL office and asks for information more or less along this line. Doubtless, too, there are a number of men holding either medical or surgical clinics, or operating at the various hospitals, who would be more than willing to demonstrate their work to their fellow practitioners from outside the city. So far as the office of the State Society is concerned, the secretary is quite willing to be the distributor of information and to receive and post all notices of the sort suggested by Dr. Goodfellow. The suggestion is so good and so timely that something ought to come of it.—Ed.]

A Question.

To the Editor of the STATE JOURNAL: A few words of commendation, a criticism, and a question; then I am done. I regard the CALIFORNIA STATE JOURNAL OF MEDICINE, on account of the principles for which it is striving, as the ideal medical publication. It is the desire of the State Society that its JOURNAL represent the Principles of Ethics in their purity, and you are certainly to be commended for carrying out the wishes of the Society in such a fearless and faithful manner. My criticism is in regard to the type used in printing many, if not all, of the original articles; it is entirely too fine and causes considerable ocular effort in perusing such articles. Am in hope that the finances of the Society will soon permit a change in this respect so that all original communications may be presented in type of similar size to that in which the editorials are printed. The question: What should be our position in reference to referring patients for treatment or diagnosis or having work done by laymen who claim proficiency in the use of the X-Ray and other electro-medical apparatus? Yours sincerely,

JOHN T. RANKIN,

Braly Bldg., Los Angeles.

[Will the members of the Society, who have considered the point raised by Dr. Rankin in regard to non-medical X-Ray operators, be good enough to forward their views to the JOURNAL office?—Ed.]

The Druggist Question.

To the Editor of the STATE JOURNAL: I have received two numbers of the CALIFORNIA STATE JOURNAL OF MEDICINE and read them carefully. I am delighted with the ethical tone of the JOURNAL. It is nearly alone in the stand it has taken on the advertising question, and is the nearest right of any medical journal I know of. I hope it may long maintain its position and not be enticed into questionable commercial methods as so many have been.

There is one important matter that I wish to call your attention to, viz: the attitude of the N. A. R. D. towards the medical profession. That wonderfully virile association is bending all its power to the task of stopping the cutting of prices, principally of the innumerable "patent medicines" of this country. It is trying to help the retail druggist. In doing so it has promulgated the doctrine that no wholesale druggist shall sell medicines to physicians, and that physicians shall not put up their own prescriptions if they want to. Is it not about time for the medical profession to organize and have drug stores established, where nothing is sold but the medicines and remedies actually prescribed by physicians? While I appreciate highly what the pharmacists have done for medicine, yet it seems to me that the druggists

everywhere in this country are so much under the influence of the nostrum vendors and the proprietary medicine firms that physicians are about to get the "horse laugh" as a set of "good things" who do not know anything about their own business. When one of our patients takes a prescription into a drug store to get it filled he or she has to run the gauntlet of a hundred or two nostrums, in all the glory of glaring labels telling the patient or his or her friend that there is no need to fee a doctor for a prescription, as there is a better, cheaper and surer medicine in the patent packages or bottles than any physician can prescribe from the materia medica. And our good friends, the druggists, who frequently bribe us by donating thermometers, handbags or pocket cases, and a variety of things for our personal use, scatter the handbills and samples of the nostrum makers broadcast over the front yards of town and country, and have flaming posters on every available space inviting the dear people to come and buy the patents and be cured. Is this insult to be forever continued and the medical profession take no means to prevent it? I think the suggestion I have made is worthy of consideration and should be brought before the whole profession of the United States. Drug stores for putting up prescriptions and selling surgical supplies, would do more for the elevation of the medical profession than any one thing I can imagine.

THOS. W. MUSGROVE, M. D.

AN OBJECT ACCOMPLISHED.

When, in June, 1897, the publisher of this journal assumed the responsibility to publish the transactions of the Medical Society of the State of Pennsylvania in journal form, he had in view the accomplishment of two special objects, namely, to prove that it could be done without the aid of the quack medicine advertisers, and also to show that the transactions of a state society published in journal form were of much greater value to such an organization than when issued in book form. As this latter was an experiment among state medical societies, it was looked upon with considerable misgivings by many members, but the results accomplished by the Medical Society of the State of Pennsylvania under this arrangement, and its adoption by some ten or twelve other state societies, also apparently with good results, proves the wisdom of the plan of publishing the transactions in monthly installments. We claim for the Medical Society of the State of Pennsylvania the position of pioneer in establishing the merits of this plan.

With regard to the advertisements, we feel that the most ethical member need blush at nothing that has appeared in this journal, and it should not be forgotten that it was not for lack of opportunity that unethical advertisements were not abundantly represented.

The publication of a medical journal, and especially one representing the transactions of a great medical society, should be as free from commercialism as is the daily life of a physician actuated by the highest motives of humanity, and no one will deny that to encourage the use of unethical remedies tends to injure the sick and afflicted rather than to benefit them, and the only advantage, therefore, that can accrue is represented by the monetary consideration.

Working for results believed to be of great benefit to both the profession and the public, the publisher has found much pleasure in his labor, but other responsibilities devolving upon him render it imperative that this work shall be carried on by other hands, and with this issue, therefore, the active participation in the publication of the transactions by the present publisher will come to an end.—Dr. König, in the *Pennsylvania Medical Journal*.

THE OPERATIVE TREATMENT OF PES CAVUS.*

By HARRY M. SHERMAN, A. M., M. D., San Francisco.

I HAVE always found the deformity called "hollow clawfoot," *Griffe pied creux*, a difficult condition to manage. It is true that section of the plantar fascia and a forcible extension of the forepart of the foot upon the hinderpart, and perhaps an achilotomy added to correct the relation of the foot to the leg, has overcome the deformity; but the position gained has not been maintained, and I have been correspondingly disappointed. The fault in this operation lies in the fact that no force is arranged for in the foot and leg to maintain the corrected position, and an extraneous retentive force is either painful or inefficient.

In the feet which I have seen, the deformity has quite plainly been due to paralysis of the plantar interossei and lumbricales. Normally, action of these muscles, holding the toes straight or even a little flexed, transfers the extensor effect of the long toe extensors—that is, the extensor proprius hallucis and the extensor communis digitorum—from the toes to the metatarsus, and extends it on the farsus. Paralysis of these two sets of muscles, plantar interossei and lumbricales, permits the action of the toe extensors to be expended wholly on the toes, pulling them into marked hyperextension, and permitting the metatarsus to stay in or go into a flexed position on the tarsus. The long toe extensors, with the combined action of the plantar interossei and lumbricales, are consequently the chief metatarsal extensors; the effect of the fibialis anticus and the peroneus tertius on the metatarsus is not very great; and the metatarsus has no special extensor muscles of its own.

The proposition was a simple one; give to the metatarsus extensor muscles to antagonize the flexor force of the plantar groups and so prevent persistent midtarsal and tarso-metatarsal flexion with consequent retraction of the plantar fascia. The needed muscles were found in the long toe extensors themselves, and the operation I have done has been to cut the tendons of these muscles from their insertions into the toes and transplant them into the metatarsal bones just behind their heads.

I have formulated and followed the following technic:

1. Because of the difficulty of holding a foot in a certain position while five tendon-sutures were applied I have, after such subcutaneous sections of fascia and tendons, and such manual or instrumental remodeling as was necessary to correct a malposition or deformity, put the foot into a plaster of Paris splint in the corrected position. Then, immediately after the setting of the splint, I have cut away so much as was necessary from the dorsum, exposed the field of the operation, and been able to do the work on the tendons quietly and without the danger of any slipping of the foot, which might tear out some of the earlier sutures while the later ones were being placed.

2. Because of the practical difficulty in putting the tendon under the periosteum of the metatarsal bone, and suturing it there while working wholly on the dorsum and in a somewhat limited space, I have carried my sutures directly through the foot and the plantar part of the splint, and have fastened them firmly on the outside of the latter. In this way I can hold the tendon closely against the denuded bone under the periosteum, and can maintain the position as long as an absorbable suture will last, and that may be about forty days, if chronicized catgut is used.

The details of the operation are as follows: Sterile gauze kerchiefs are disposed about the foot and next



Fig. 1. Sterile gauze kerchiefs on the foot before the application of the plaster of Paris splint.

to the skin, so that they can be folded back after the opening in the splint is made (Fig. 1), and be made to cover the uncut part of the splint itself, and give a sterile surrounding to the operation field. The splint is then put on, permitted to set with the foot in the corrected position, the dorsal part of the splint cut away (Fig. 2), and the kerchiefs folded back (Fig. 3) and fastened by a sterile bandage (Fig. 4). A quadrilateral flap is now made, its at-



Fig. 2. A quadrilateral opening in the dorsum of the splint, exposing the gauze underneath.

*Read at the Meeting of the American Orthopedic Association, Atlantic City, June 11, 1904.



Fig. 3. The kerchiefs folded back, exposing the skin beneath.

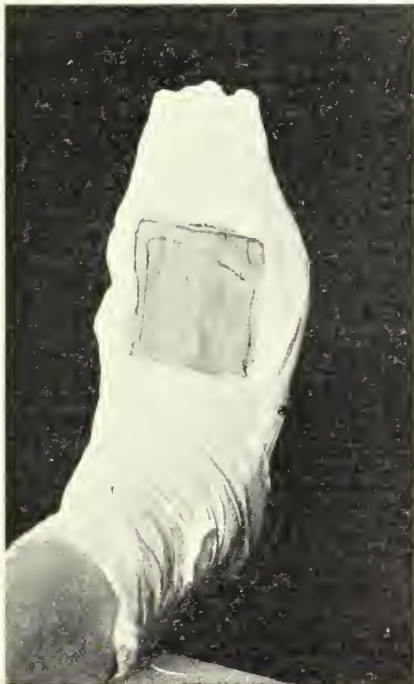


Fig. 4. The kerchiefs bandaged down by a sterile bandage, giving the operation field a sterile environment. Shape and size of the flap outlined on the skin in ink.

tached base at the tarso-metatarsal line, its sides at the inner side of the first and the outer side of the fifth metatarsal bone, and its free margin at the metatarso-phalangeal line. (Fig. 4 shows the position of the flap incisions.) The turning back of the flap exposes all the toe extensor tendons as they traverse the metatarsus. The extensor proprius hallucis tendon is now picked up,

cut just behind the head of the first metatarsal bone and turned back from its sheath. The periosteum thus exposed is incised along the dorsum of the bone and separated toward either side. Two chromicized catgut sutures, each having a long, strong, straight Hagadorn needle on either end, are passed transversely through the tendon, nearer its dorsal than its plantar surface, the distal sutures about 1 cm. from the cut end and the proximal about the same distance behind this. One of these needles is passed on either side of the bone, between it and the reflected flap of the periosteum, and then on through the sole of the foot and the plantar part of splint. Now, when these two sutures are pulled taut and tied on the sole of the splint the tendon is held tight to the denuded bone, and is partly covered by the flaps of periosteum (Fig. 5). The value of the splint is now seen, for this toe may be disregarded during the operation on the others. The other tendons are treated in an exactly similar fashion, except that it seems that one suture may be enough for a tendon instead of two. After the last tendon is sutured, the flap is replaced and stitched by a subcuticular suture, a proper dressing is put on and another plaster of

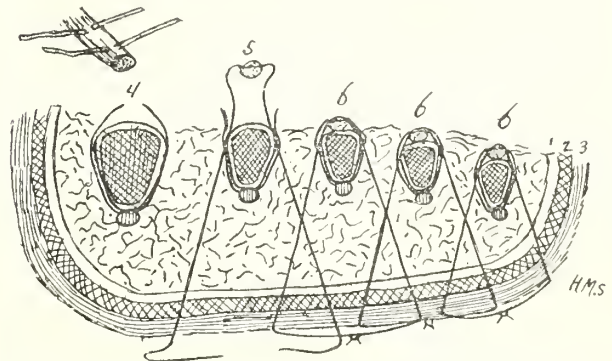


Fig. 5. Schematic section of foot at point of suture. 1. Integument. 2. Layer of gauze. 3. Plaster of Paris splint. 4. Sutures through the tendon, and the bone and periosteum prepared for the suture. 5. The suture in the tendon and through the foot and splint, but not pulled taut and tied. 6. The tendons fastened in their subperiosteal location, and the sutures tied on the outside of the splint.

Paris bandage is put about it all to retain the dressings and strengthen the splint. Unless there is some reason for doing otherwise, the dressing and foot are left undisturbed for six to eight weeks. To get the best functional result, the foot should be in a position of slight dorsal flexion (extension) at the ankle joint.

Now in all the cases in which I have done this, eight feet in six children, the immediate result has been what was intended. The effort to lift the front of the foot really did lift it, and was not wasted in hyperextension of the toes. But in two cases it has seemed that the big toe tendons have become loosened from their insertions on the metatarsal bones, have reunited to their distal ends and resumed their original insertions; and in one case this was followed by a partial relapse into the deformed position. To prevent this I have, in later operations, cut off as much as possible of the distal end of the tendon, but it may be found necessary to use a more permanent suture material, such as silk, which can be buried in the foot and left there, instead of the chromicized catgut. If that is done it should be passed around the bone by an aneurism needle or a Durham or Goodwillie needle, so as to make its location definite. This plan I have not yet tried. It might, again, be possible to use silkworm gut sutures in the manner described for the catgut, and to slip them from their places in the tissues at the end of the time of splint restraint. This also I have not tried.

The correction of a deformed position before an operation on tendons to maintain this correction, is, of course, a usual matter; but the application of a splint to maintain the correction easily and surely during the tendon transference is an addition to the technic of not indefinite value.

In talipes calcaneus, when it is intended to transplant the tendons of some of the posterior tibial group of muscles to insertions into the os calcis, to take the place of the sural muscles, it is advisable to correct the position of the os calcis definitely and to let this be the limit of the first operation. At a later time, with the foot still in the retentive splint, the operation on the tendons can be done with a quiet certainty which is foreign to the operation where an assistant's hands must be trusted to maintain the new position during the suturing of the tendons and of the incisions, and while the splint is being put on and is setting.

If the tendon operation is done at the same time as the corrective procedure, it then will be possible to practice the suture which passes through the foot and splint and ties on the outside of the latter, for the needle passes with but little difficulty through the freshly set plaster of Paris bandage. But there is one practical point which must not be forgotten. A needle which has passed through the plaster of Paris splint must not be considered aseptic and re-threaded on another suture for use. On the contrary it must be considered as septic, and be re-sterilized before it is used a second time. Again, there must be no to-and-fro pulling of the sutures after they are in place, else plaster of Paris may be carried back into the wound, with great possibility of its infection. Moreover, when the splint is removed it is necessary to see that the foot is not bound to the splint by unabsorbed sutures, as may happen.

I have applied this simple plan of putting on the retentive splint after the correction of the deformity and then immediately doing the operation on the tendons, through a fenestrum cut in the splint, not only in the operations described, the transposition of all the toe extensor tendons to metatarsal insertions, but also in the transposition of posterior tibial and peroneal tendons to os calcis insertions, and in transposing the extensor proprius hallucis to an insertion on the cuboid or fifth metatarsal to take the place of paralyzed peroneals, and once in an operation on an extensor tendon of a finger, in which the little middle slip of the extensor communis digitorum, which is inserted into the base of the second phalanx, had been cut by a punctured wound. In this instance the chromicized gut suture pierced the tendinous slip transversely, then was led by fine needles through two holes which had been bored in the bone at the proper places and then passed through the integument of the flexor aspect of the finger, on either side of the flexor tendons, then on through the splint where the two ends were tied. The union of the tendon to the bone, in this instance, was most satisfactory. In giving tendons new insertions on the os calcis it is, also, necessary to drill holes through the bone for the passage of the sutures to the sole.

As regards the results of the operations on the cases of hollow clawfoot, one patient in whom the implantation of the tendon was not secure, may be counted a failure in one foot, and a partial success in the other. All of the other cases have been satisfactory so long as I have been able to follow them, but that has been only for a comparatively few months, and this report can be considered as only suggestive and provisional.

P. S.—Another patient operated upon since the writing of this paper, demonstrates perfectly the transference of the action of the long toe extensors to the metatarsus.

A CASE OF TRIGEMINAL NEURALGIA, PRESENTING SOME UNUSUAL FEATURES, TREATED BY INTRANEURAL INJECTIONS OF OSMIC ACID.*

By T. C. McCLEAVE, M. D., Berkeley.

IN 1899, W. H. Bennett, of London, advocated the intraneural injection of osmic acid for the relief of trigeminal and other neuralgias, and reported (1) ten cases cured by this method. In 1903, Dr. John B. Murphy reported (2) a case apparently cured, and has since so treated six other patients, all of whom have remained free from pain. These cases were all severe in type, and had resisted all previous attempts at cure, several patients having undergone various operations without benefit.

The operation consists in the exposure of the affected branches of the nerve at the foramina of exit, the supra-orbital, by a small incision along the lower border of the eyebrow; the infraorbital and mental by small skin incisions or through the mouth. The former method seems preferable, as the incisions may be small and can readily follow lines of the face, thus leaving inconspicuous scars. The nerves are elevated by blunt hooks, and a few drops of freshly made 1.5% solution of osmic acid injected into the nerve at several points, and also into the space about the nerve as it lies in its bony canal, using a hypodermic syringe with a fine needle. The operation is followed immediately by partial relief from pain, which becomes complete in the course of some days, indicating that the acid induces certain degenerative changes in the nerve, the exact nature of which is not at present known. There has been no recurrence of the pain in any of the previously reported cases. My own case is as follows:

Mrs. B., 56 years old, gives no history of constitutional or other diseases which might be of significance in this connection. In December, 1891, she sustained a fracture of the leg in an accident, but no other known injury. Two months later she had a severe attack of right-sided trifacial neuralgia, which lasted three or four weeks, and finally subsided under treatment, not recurring until more than a year later, in June, 1893. From this time on the attacks recurred at irregular intervals. Five or six years later, patient began to notice pain on left side of face as well as on right, and this has since continued, never becoming so severe on the left, however; and a peculiar fact has been noted that at the period of greatest intensity of the pain on either side, it was very much lessened on the opposite side, the paroxysms never involving both sides at the same time. Of late years the paroxysmal attacks have become progressively more severe, and even in the intervals there has not been complete freedom from pain, the patient living in continuous dread of precipitating an attack by the slightest irritation of the nerves in chewing, talking, by draughts of cold air, etc., to the very great detriment of her nutrition and general health. All three divisions of the nerves were involved. During these years she has been treated in all sorts of ways by numerous physicians, but their attempts to relieve her have alike resulted in failure.

In September and October, 1901, the late Dr. Brigham did two operations on Mrs. B. in which he is said to have resected portions of the supra and infraorbital branches, and of the inferior dental, but the pain returned within a brief time with increased severity. The patient was then removed to St. Luke's Hospital, San Francisco, in January, 1902, where Dr. Brigham contemplated some further operative measure, but gave up the idea at the instance of Dr. Moffitt, who saw the patient at this time, and advised that any further operation would be useless, as he considered the pain of spinal origin, basing his opinion upon its bilateral occurrence and upon certain disturbances of the reflexes, etc., which he observed. Treatment with large doses of quinin and potassium iodid then seemed to give some promise of relief, but only for about three weeks. A change of climate was then tried, the patient going to Stockton, where some temporary benefit seemed to be derived from the warm weather and the ministrations of an osteopath, but the pain soon returned.

She came under my care December 20th, 1903. Her condition at this time was distressing in the extreme. She was weak and emaciated from inability to eat and loss of sleep, and tortured by pain so severe as to require almost lethal doses of morphin to control it. I advised the osmic acid treatment, and operated January 13, 1904, on the right side, exposing the nerves through small skin incisions, and injecting the acid as directed by Bennett.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April, 1904.

The nerves picked up above and below the eye appeared in every respect normal, and were easily injected, but the nerve at the mental foramen consisted of simply a few filaments of nerve tissue, and no intraneural injection was possible. The needle was inserted into the bony canal, however, and the acid injected therein. The operation was followed by almost immediate and complete anesthesia of the area supplied by the supra-orbital branch, but prompt return of pain in the other branches.

Second operation, January 29th, 1904. Pain very severe before anesthesia. Incision $1\frac{3}{4}$ inches long along the lower border of the orbit, and the cheek retracted so as to freely expose the surface of the bone below. It was then seen that the nerve injected at the first operation was but one of a number emerging through a bony slit about $\frac{3}{8}$ of an inch long and uniting to form a tortuous mass the size of a small marble from which numerous larger and smaller nerves radiated downward into the tissues of the cheek. So far as possible all of the nerves, both proximal and distal, to the neuroma mass were drawn out, injected with acid, and severed, the mass being thus removed. The inferior dental nerve was then attacked by an incision over the ramus of the jaw opposite the dental foramen, exposing the bone, which was penetrated by means of a small trephine and the nerve picked up before entering the foramen. Here were found a large nerve about the size of a slate pencil, and several smaller twigs, one probably the mylo-hyoid branch. These were injected proximally and distally, and about $\frac{3}{4}$ of an inch of the nerve trunks excised. The wounds were closed with horsehair sutures, and primary union occurred in spite of the unavoidable contact of the acid with the tissues, which results in more or less charring of the cut surfaces. The patient awoke from the anesthetic free from the right-sided neuralgia, and has continued so.

It may be said that the resection of the nerves in the second operation interferes to an extent with the clear demonstration of the efficacy of the osmic acid treatment as applied in this case, but it will be remembered that the supra-orbital branch received no treatment but the acid injection, and it has remained as painless as the nerves which were both cut and injected. It is also important to note that my operations, which so far as I can learn were practically the same as those done by Dr. Brigham, plus the injection of the acid, have been followed by a much more satisfactory result.

As to the spinal origin of the pain in this case, I cannot say. If it be due to irritation in certain areas of the cord, with reference of the painful sensations peripherally, just as pain appears to be felt in an amputated limb, for instance, I am at a loss to understand how any operation on the peripheral nerves can result in any but the most transient relief, and especially how any particular method of interrupting the continuity of the nerves can be more efficacious than any other method, since the pain is supposed to be independent of the condition of the nerves; yet in my case the results of the two series of operations by Dr. Brigham and myself have differed greatly. Moreover, the operations disclosed sufficient local disease to account for the neuralgia on the right side. This, of course, does not exclude the spinal element, however, and the pain may recur as prophesied; but even so, to declare the operation on such a patient useless would be a mistake, for in this instance, at least, it has been amply justified by the relief afforded, even if this shall prove to be of but a few months' duration, and by the already very great improvement in the patient's general condition, both physical and mental.

I have, therefore, desired to take this opportunity to call to your attention a method of treatment of this terrible condition which is very promising, simple and safe, but which, judging from the paucity of reports regarding its use, seems as yet to have failed of the recognition it may prove to deserve.

Aug. 25, 1904.—The condition of this patient at present, seven months after the operation, is as follows: There has been no recurrence of the right-sided neuralgia, though there is some soreness in the cheek and occasional twinges as though some small nerve had escaped attention at the time of the operation. There has been a decided diminution in severity of the left-sided neuralgia. The patient has gained in weight some twenty-odd pounds, eats well and sleeps well, which was impossible before, and

has been enabled to resume the family and social life, from which she was debarred for a long time previous to the operation.

I would offer the suggestion that the osmic acid should be tried in every case of trigeminal neuralgia, before resorting to any nerve cutting or other more radical operation.

(1) W. H. Bennett, *London Lancet*, 1899.

(2) John B. Murphy, *Journal A. M. A.*, 1903.

SOME REMARKS ON HYSTERECTOMY, WITH SUMMARY REPORT OF ONE HUNDRED CASES.*

By W. W. BECKETT, M. D., Los Angeles.

HYSTERECTOMY is indicated on fibro-cysts, in all edematous tumors when accompanied by watery discharge, in large tumors causing symptoms, in all fibroids except those suitable for myomectomy and small ones which cause no inconvenience and after the menopause, in malignant disease of the uterus, uterine rupture during labor, chronic endometritis with pus-tubes, in some cases of procerdientia, in puerperal sepsis, and in certain other rare conditions. The vaginal route is preferred in all cases where the uterus is not large, and in malignant cases where the disease has not advanced beyond the cervix. Clamps are only to be used when it is necessary to keep as far away from the uterus as possible to avoid diseased tissue.

After separating the bladder and rectum from the uterus, the tissues on either side of the cervix are ligated and cut away to a level with the internal os. A wedge-shaped section of the uterus, including the cervix and extending to the fundus, is then removed. This leaves but a small portion of the uterus on either side, and allows ample room to complete the operation. The operation is completed by bringing the stumps of the broad ligaments down into the vagina and closing the intervening space with interrupted catgut sutures. Catgut is used throughout the operation. Any bleeding points that remain are caught with hemostatic forceps, which are removed in about 24 hours.

When clamps are used, a sterile gauze packing is placed well above the end of the clamps, lightly filling the intervening space and the vagina. The clamps are removed in from 24 to 48 hours. The gauze is not disturbed until the fifth day, unless there are indications. It is all removed by the seventh day.

The advantages of the vaginal route are: A smaller opening of the peritoneal cavity, greater rapidity of operation, less shock, more rapid convalescence, avoidance of frequent dressing of the abdominal wound, less danger of infecting the peritoneal cavity and a lessened mortality.

Supra-vaginal hysterectomy should be done for large non-malignant tumors. The uterine and ovarian arteries are secured on both sides with catgut. The anterior and posterior flaps are united with catgut Lambert sutures, closing over the stump of the cervix and leaving no raw surface exposed. The intervening dead space between the flaps is either drained for 24 hours with gauze covered with rubber tissue, or not drained at all. Total hysterectomy should be done in all malignant cases.

There is, as yet, no reliable indication for hysterectomy in acute puerperal infection. Prompt intra-uterine treatment, at the proper time, will cure almost every case. But in a few exceptional cases, in which these measures prove inadequate, hysterectomy should be performed. Cases most favorable for this treatment are those in which the infection is localized in the uterus and adnexa. Before operating it is well to determine the condition of the liver and

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kidneys. Many die of septic nephritis and purulent thrombosis. In case of pus-tubes, the uterus is always diseased, and should be removed.

The following is a summary of 100 patients operated upon by me. Of this number, 46 were for fibroid growths, 18 for malignant disease, 27 for chronic endometritis with diseased tubes, 8 for procedentia, 1 for imperforate os. The youngest patient was 16 years old, the oldest 71 years.

Vaginal hysterectomy was performed 72 times; supra-pubic, 28 times.

Four patients died. One from pulmonary embolism, the third day after operation; one from malignant stricture of the bowel, seven days after operation; one from surgical shock, and one from exhaustion.

Of the malignant cases, six have recurred; the earliest, one month after operation; the latest, one year after operation.

In three cases there was alarming post-operative hemorrhage, one occurring six days after operation, one eight and one nine days. In one case clamps only were used; in one case, ligatures only, and in the other case both clamps and ligatures were used. In each case clamps were reapplied for 24 hours. All recovered without further interruption. Whenever possible, one ovary was left, and in some cases both.

In the case of the sixteen-year-old girl, with the imperforate os, the uterus was dilated to the size of a seven months' pregnancy and the cavity filled with retained menstrual fluid. The right ovary was cystic, and about the size of a small orange. In the left side there was an ovarian cyst the size of a fetal head. The left fallopian tube was 12 inches long, and distended with menstrual fluid.

In three cases dermoid tumors complicated the operation.

When hysterectomy was done for procedentia, anterior and posterior colporrhaphy was also performed.

One patient, after a supravaginal hysterectomy, had a slight irregular menstruation for nearly two years following the operation. In this case only one ovary was removed.

DISCUSSION.

Dr. W. F. B. Wakefield, San Francisco.—The doctor's paper is so full of points that it is very difficult to know just where to start to discuss. It is impossible to take up all the points. In the first place, he speaks of vaginal hysterectomy as being applicable to cases of cancer of the cervix where malignant degeneration has not gone beyond the cervix. One cannot tell when it is still confined to the cervical tissue. In cases of cancer of the cervix, in probably 90% the upper uterine tissues are undoubtedly affected, and that without any demonstrable condition being present. You cannot palpate malignancy of the endometrium. The glands up along the iliac vessels will be very much involved and yet you cannot feel a particle of thickening. I studied in Vienna 100 or 150 specimens in cases where apparently the parametrium was uninvolved and the glands uninvolved. I believe in justice to women who come to us with cancer of the cervix: there is no operation that can guarantee cure for cancer of the cervix. A very radical operation with the removal of everything, analogous to operation for cancer of the breast, would give you but a fair chance of recovery from the shock of the operation. But if we are going to suggest a vaginal hysterectomy, we ought to say that the only thing we can promise is that we cure 5% of the patients who come to us, and prolong life in 10 or 15%. You say that the statistics show 15 to 50% of cures, but those statistics, I am sure, are absolutely incorrect. Consider Johns Hopkins. There is no institution where better work is being done than there. They claim to cure 10% of the operable cases. Making choice between the operable and inoperable, they probably cure 5%, but no more. The

case they deem to be operable they give the operation the benefit of the doubt. I feel very seriously on this matter. We ought to be very careful in the attitude we take. We certainly ought to tell the patients the small percentage that recover. Cases are constantly recurring even 10 years after operation. If we follow them that long we will be doing well if we cure 5%.

Dr. A. W. Morton, San Francisco.—I would like to say a few words as to whether to take the abdominal or the vaginal route in these cases. I see that the doctor prefers the vaginal route. In my mind the vaginal route has some good points. If you are using it for drainage, I think it is an excellent thing for temporary use. But if you are going to do a hysterectomy, there are too many complications that are likely to arise. I think it is far better to make the abdominal route, and see what you are doing. Only two weeks ago I was doing a vaginal hysterectomy, and expected to take out a pus tube on the left side; the first thing I knew my finger was in a cancer of the bowel that was involved in the tube. It would have been better to have opened the abdomen and made an anastomosis of the intestine. The history in this case did not justify the diagnosis of carcinoma. A man who does vaginal work is going to have fistulas of the bowel. It is only a year ago that a patient came to me with a fistula of the bladder following a vaginal hysterectomy. A few years ago, before I did much work, I assisted in the east a man who did vaginal work. I dressed his patients, and it was not unusual to find fecal fistulae. It is simply because you are unable to see the field where you are working. As to the advisability of doing hysterectomy for carcinoma of the uterus, many of the best men advise it. I saw a report by Dr. MacMonagle of 300 hysterectomies with recovery, following them for 10 years; 1 or 2%. With such statistics as that I cannot promise, when I do a hysterectomy, any cure.

Dr. Beckett, Los Angeles.—With reference to cancer of the cervix, I certainly agree with Dr. Wakefield. In most of my cases there has not been time to know whether there has been recurrence or not. I always tell the patient's friends that it is only a palliative operation. The reason why I suggest vaginal hysterectomy is because it is a safe one. If we are doing a palliative operation, we want a safe one. Dissect out all of the glands and tissue, and a great many of the patients will die. Most of our American women will not submit to such an operation. The greatest trouble is to get these patients when we have only a small portion of the cervix involved. I have one woman now who was operated upon five years ago. I told her that it would return in six months, and regretted very much to do the operation at all. She has been spared to her family now nearly five years, and there is no return as yet. That operation is justifiable. I went through the vagina and took out everything as far as I could, and in six weeks she was quite well. I agree that we ought to explain these things to our patients or their friends. In reference to the vaginal fistulae, I think they were produced by nicking the intestine and by allowing the clamp to extend up into the intestine.

"In the hope that the mission of these pamphlets may fulfill all that its authors and originators intended, and carry comfort and consolation into the homes of the afflicted, we dedicate this to the children of San Francisco—her future sons and daughters." (Apparently this is a delicate compliment to the unborn.)—*Health Hints for the Household*; S. F. Board of Health.

A verdict of \$100 was sustained by the Supreme Court of New York for an injury described as "a black eye."—L. Sexton.

SOME WRINKLES WITH FEHLING'S TEST FOR GLUCOSE

By WILLIAM C. RILEY, M. D., San Francisco.

THESE remarks were mainly inspired by seeing an article a little while ago in one of the journals in which Fehling's test, the test of the multitude for glucose, was quite roughly handled, nor could any good be found in it. It was difficult to make, difficult to keep, annoying to use—just think of the annoyance of mixing two solutions together!—indeed, the only modicum of praise it got was being a good "negative" test. Damned with faint praise, could anything be worse? I purpose to show in what follows that these strictures are in a measure unjustifiable, and that when used in a proper manner, Fehling's solution is a good positive test for glucose in urine, or in anything else, for that matter.

Whatever may be said and written about tests for glucose in urine, and the fallacies and failures of Fehling's test therefore, rest assured that the average practitioner, and sometimes more than the average, usually relies upon it; and for many reasons. It is a reliable negative test used in any old way; this often suffices. It is convenient, easily prepared or gotten from almost any drug store, made in a fairly reliable way. If made of purified crystals of copper sulphate, or even from a good average commercial article, one need only weigh out the requisite amount on even the ordinary prescription balance, and thereby get a pretty accurate solution for quantitative work. At all events, the limit of error of a solution prepared in this manner is usually well within the experimental error of determination, except in a skilled chemist's hands—and for the edification of skilled chemists I am not writing. This advantage of weighing out one salt renders a standardization by means of sucrose into glucose unnecessary unless, of course, very accurate work is to be done, as in some problem investigation or commercial analyses.

Unfortunately Fehling's solution, as ordinarily used for qualitative work, is not in many instances a reliable test; and it is to clear up this difficulty, remove doubts, save time, trouble and annoyance to the general practitioner that I propose a more general use of Fehling's solution in the cold—that's the secret of the whole thing, and it does the work; which is all one ought to expect. One should start out with correct premises, so I give the formulæ of the solutions I have used for many years, and not found wanting; a moderate amount may be mixed ready for use, and kept for perhaps three or four weeks without deterioration.

FOR THE COPPER SOLUTION, A.

Pure sulphuric acid.....	1.00 gram
Cryst. Copper Sulphate ($\text{CuSO}_4 + 5\text{H}_2\text{O}$)	34.64 "
Water enough to make	500.00 cc

FOR THE ALKALINE SOLUTION, B. (This is where formulæ differ.)

Sodic hydrate sticks, (reasonably pure).....	60.00 grams
Sodic-potassic tartrate (recrystallized is best)	175.00 "
Water enough to make	500.00 cc

Equal parts of A and B make Fehling's test solution.

In ordinary testing with this solution a small amount should be boiled and allowed to cool partially before the urine is added, say to a temperature of 180 to 200 degrees Fahrenheit. Then the mixture with urine should not be boiled. It is unnecessary and misleading to boil. If the glucose is there it will soon show by the characteristic yellow or reddish yellow precipitate—seldom red. This alone will give negative results in glucose-free urines that ordinarily

would show some reaction when boiled. Better yet, and best, especially where the hot Fehling's has given a slight or an atypical reaction (muddy yellow solution, blue color partially discharged, or other anomalous proceeding), take equal parts of the suspected fluid and Fehling's, cold, mix thoroughly and set aside. Any urine containing one-twentieth of one per cent or more (0.05 per cent) glucose will react, giving a yellow precipitate in the course of twenty-four hours or less, according to the amount of glucose present and the room temperature; I am speaking of an average room temperature of 60 to 65 degrees Fahrenheit. I plead for a more extended use of this simple expedient. Time is not usually precious in these cases. Freedom from doubt is.

I am quite well aware that it may be said that we have the phenylhydrazin test and others for clearing up our doubts. It is true, and practically the phenylhydrazin test is the one oftenest resorted to. In answer to this objection, permit me to remind those who have had experience with phenylhydrazin that it is not all plain sailing, particularly where the percentage of glucose is small. It requires skill and knack and a large amount of practice to get reliable results. Phenylhydrazin hydrochlorate, at least in many samples of Merck's which I have had, has not been particularly good in keeping qualities. The general practitioner is seldom going to use it even if he has it. I am not speaking disparagingly of phenylhydrazin; it is invaluable, accurate, definite and distinguishing (the last by the aid of the microscope and melting point of crystals obtained); I simply do not believe it suitable for the average man.

As regards the limitations of cold Fehling's solution, there are many urines containing neither sugar, glucose nor the ordinary reducing drugs as salicylates, etc., which, with Fehling's as ordinarily used, will give either a typical reaction or one in which we are in doubt; a sluggish reaction, a partial decolorization of the solution and even a slight precipitate of cuprous oxide. This class of urines, I can positively assert, will not in twenty-four hours give a yellow precipitate with equal parts of Fehling's test solution used cold. Anything less or other than a distinct yellow precipitate is not to be counted. These urines usually give a positive reaction when heated with Fehling's solution, from the presence of alloxure bases in excess. Kreatin and kreatinin are favorites for doubtful reactions. How much farther can we go with other sugars or commonly reducing drugs? In answer, I append a little tabular statement giving the commonly occurring reducing agents. Any one can verify this table very easily, as the time consumed in making the tests is practically nil. As is seen, levulose acts exactly similar to dextrose. Any person having levulose in the urine is to all intents and purposes a glycosuric patient. About glycuronic acid: Some people claim this as the chief offender. It is largely so when hot Fehling's is used. It offends no longer with cold; *i. e.*, in reasonable amounts such as will react positively with hot Fehling's always.

I promised you some wrinkles with Fehling's; here is another, and from the chemical standpoint more important: It is indeed a time saver. No originality at all is claimed, only again a plea for a more extended use of it. Perhaps the reason this method is so little used—many chemists seem to be entirely ignorant of it—is because when first reported it was unfortunately reported incorrectly, and gave, when used, very inaccurate results. In 1892, at a meeting of the British Pharmaceutical Conference in Edinburgh, Mr. A. W. Garrard, F. R. S., read a paper on the subject, but had not used his method properly—a mere matter of boiling made the difference between very good and very bad results. The writer soon found this out for himself, and adopted it, and has had no cause for regret since. It is for the quantitative determination of glucose (and, of course, of other reducing agents, if they be present). Take Fehling's

Substance added to Urine. 1030 sp. gr.; acid, no alb.; no sugar.	Grains to 1 ounce	Hours let remain.	A Reaction cold Fehling E. 9 parts	B Reaction hot Fehling's with- out standing	C Reaction on heating A after standing the specified time	Remarks
Sodii Salicylate.....	5	36	None	Marked.....	Slight.....	
Urine of patient taking 15 grains Soda Salicylate every 4 hours. S. G. 1030; acid; no alb.; no sugar.....	.....	24	{ Greenish col. to sol.; no yellow ppt..... }	{ All blue color discharged; muddy yellow }	{ Same as B, only have to boil longer }	
Urine 0.025 alb. (Esbach). S. G. 1035; acid; urates dep.; no casts; Epithelium, much.....	1/8	24	{ Greenish col. to sol.; no ppt..... }	{ M'rk'd yellow discolor.; all blue discharged..... }	Same as B.....	{ Probably other urinary constituents besides albumin augment this reaction. }
Urine, alb., trace; pus, urates, oxalates, yeast cells. S. G. 1032; color dark.....	.....	24	None	Typical	Typical.....	{ Originally a 1/2 % glucose urine; fermented when obtained; phenylhydrazin HCl test fails to give positive reaction. }
Urine, 1035 S. G.; very acid; high color; urates dep.; no alb.; no sugar .....	.....	24	None.....	{ Yellow muddy color	Same as B.....	{ One of those don'tful urines, just where confusion arises with Fehling's. }
Acid Oxalic	5	36	None.....	None.....	None	
Maltine	10	1	Typical	Typical.....	Typical.....	Reaction in cold very prompt.
Dextrose (glucose)	1/4	24	Typical	Typical	Typical.....	0.050 % solution.
Formalin (40% commercial).....	10	24	None	Typical	Typical	
Acetone.....	10	24	None	None	None	
Manna.....	5	24	None	{ Sluggish but typical }	None	
Lactose	5	24	None	Typical	Typical	(Milk sugar.)
Alcohol	20	24	None	None	None	
Chloroform, saturated sol. in Urine.....	.....	24	None	Typical	{ Slight but typical }	
Chloral Hydrate	4	24	{ Green color to solution }	Typical	{ Muddy yellow color	{ Chloral 4 grs. to 1 oz. and cold Fehling equal parts let stand 36 hours and then heated fail to give positive reaction. }
Levulose.....	5	24	Typical	Typical.....	Typical	
Maltose	1	12	Typical	Typical .....	.....	{ 1% maltose. If Fehling, say 2 cc be heated to boil, taken from flame and 15 drops added and no further heating, reaction very sluggish, beginning in 3-4 min. }
Di Acetic Acid.....	5	24	None	None	None	
Saccharine	3	24	None	None	None	

Column "C" is inserted to show that many reducing agents, in prolonged contact with a strongly alkaline solution containing an oxidizing agent, are more or less decomposed without precipitation of suboxides, thus offering a possible explanation of the efficiency of the method of "Cold Fehling's"

solution (mixed, copper and alkali) 10 cc., dilute with a little water, heat to boiling and add, while boiling, a solution of potassium cyanide (KCN). I use 20 per cent solution or thereabouts. Add drop by drop until the solution is just decolorized while boiling. To this mixture add now 10 cc. Fehling's solution, boil, and while boiling add your glucose solution or urine, best not over 1 per cent solution—add till just decolorized again—(with dark urines the color becomes greenish yellow). This marks the end reaction. Read off on your burette and estimate on the basis of 10 cc. Fehling's only (equals 0.050 grams glucose).

By this method we avoid the tedious waiting for the solution to clear of precipitated cuprous oxide in order to see if the color is all gone; in some estimates with Fehling as usually used it is almost impossible to tell this, thus avoiding two sources of error, the doubt as regards all color gone, and the well-known fact that an excess of hot Fehling's kept in prolonged contact with a deficiency of glucose is reduced more and more as time goes on.

To avoid the troublesome settling of the cuprous oxide in the ordinary analytical operation some one has proposed the addition of a solution of calcic chloride, in small amounts, the lime precipitate carrying down the more flocculent copper oxide. From personal experience I know that the lime precipitate also carries something else with it not so desirable, viz., copper from the solution; hence your glucose percentage reads higher than it should. Various other expedients are adopted, all open to the same objections, time and prolonged contact of Fehling's solution in excess. In fact, if one aims to get accurate results with Fehling's as ordinarily used, he must first make a preliminary determination to know about where he stands. This is obviated by Garrard's method.

I find it convenient to have the KCN in sticks in a tightly closed wide-mouthed bottle. I break off a small piece and pour boiling water over it when I desire to make only an occasional determination, because KCN does not keep well in solution. Ammonia forms and vitiates the results. The whole determination can be carried out in much less time than it takes to tell of it.

In closing, I should like to call attention to a grave error (probably typographical) in one of our most widely used guides to laboratory work, "Clinical Diagnosis," by Simon. This error is contained not only in the earlier editions, but is industriously propagated in later editions; viz., 5th edition 1904, when, in speaking of the standardization of Fehling's by means of sucrose converted into glucose, directions are given to keep at the boiling point for one hour the solution of sugar (cane), with the addition of 22 drops of 0.1 per cent solution of sulphuric acid. Probably a 10 per cent solution of H₂SO₄ is meant, which is not too much. Unless acid to about that amount is added much sucrose remains unconverted at the end of an hour at 100 degrees Centigrade.

The Obstetric Bag.—Dr. John R. Hamilton writes to the *British Medical Journal*: "I believe that the bag of to-day is dangerous; but the danger lies in its size. It can hold too many instruments of offense—more potent to damage than the most subtle germ, and at the same time being the germ's true friend. I would recommend all young practitioners to procure a very small leather bag, if they desire to be successful obstetricians. They will find in the course of twenty-five years few mishaps if they keep their hands clean, and do not fuss too much."

MYOCARDITIS, WITH SPECIAL REFERENCE TO DISORDERED METABOLISM.*

By DR. W. W. KERR, San Francisco.

Members of the Alumni Association—Ladies and Gentlemen: When your executive committee asked me to deliver the first Toland Lecture, they modified this request by suggesting that the topic should be something clinical, about the heart. The choice of a subject has thus been rendered less difficult, and the responsibility for failure consequent upon such a selection was divided between us.

The subsequent remarks upon treatment of the myocardium do not constitute even an epitome of the whole subject; our endeavor is simply to direct attention to some features in the treatment of heart disease, which seem to be very frequently overlooked among the host of therapeutic measures directed toward the relief of cardiac disturbance. Nothing new is offered; we only look back over the practice of nearly a quarter of a century and see what lessons have been learned; or compare the past with the present and ask ourselves whether in the adoption of new remedies and new methods we have not occasionally discarded older ones of greater value; whether in each and every case the change has meant actual progress.

The heart is the most abused organ in the human body, even more so than the stomach, because when the latter is overworked it rebels and has its own vigorous methods of enforcing its demands for a period of absolute rest; but when the overworking, overtaxed heart, by an attack of palpitation or other form of cardiac distress, advances its plea for a diminution in the strain to which it is subjected, the response only too often comes as a whip of stimulation in the form of alcohol, digitalis, ammonia or some similar agent. The mere allaying of a symptom such as palpitation does not demonstrate that the correct treatment has been used, because it frequently happens that a stimulant will steady the heart's action when the condition of the cardiac muscle demands sedatives and rest; but the promptness of response may deceive one as to the gravity of the situation, and consequently the urging process goes on until the over-driven heart begins to stagger under its efforts, and even then the attendant may fail to recognize the fact that injudicious treatment has simply hastened the development of irreparable myocardial changes.

There is a fascination about the mechanics of the heart that tempts one to regard cardiac disease simply as an indication of a disordered machine without taking into account the condition of the tissues which compose the organ; all symptoms seem to call so loudly for increased or diminished action that there is a liability of adopting a line of treatment which will compel the heart to the performance of its functions without our full cognizance of the condition of the viscus, and it may be without making an attempt to discover or remove the cause of the disturbance; we may be so interested in our endeavors to obtain mechanical effects that we fail to watch the condition of the machine. Much injury may be done by acting upon the idea that a weak heart always demands a cardiac stimulant; in fact, better and more permanent results can be obtained by bringing the demands of the body within the capabilities of the heart rather than by compelling the heart to rise to the demands of the body. Frequently there are patients about 50 years of age suffering from mild cardiac disturbance who are relieved from time to time by means of digitalis or strophanthus, but unfortunately the treatment is allowed to stop at this point, with the result that the distress is allayed only to return, and to return each time after a shorter interval. These are generally cases of incipient muscu-

lar change, and it is not improbable that if some effort were made to discover and eliminate the cause of injury to this cardiac muscle the degenerative process might be retarded or even arrested. In thus protesting against the indiscriminate use of cardiac stimulants, and especially of digitalis, I do not wish to be understood as maintaining that digitalis is destitute of nutritive influence; on the contrary the improved circulation through the cardiac muscle must be of great value in restoring tone to the muscular fibres; but there are changes due to constitutional conditions when the heart failure is the result of malnutrition, or of some toxin or product of perverted metabolism circulating in the blood, and the treatment of such cases by digitalis alone is certainly inadequate; in fact, the use of this or any other cardiac stimulant may be positively injurious under such circumstances.

Errors in treatment are more frequently due to mistakes in diagnosis, so far as the detection of murmurs is concerned, than to a failure to appreciate or a neglect to ascertain the state of the cardiac muscle and the existence of conditions detrimental to it. An examination of the heart should be an attempt to ascertain at least four things: (1) the condition of the valvular orifices; (2) the condition of the valve segments; (3) the condition of the cardiac muscle; (4) the causes of the cardiac disturbance. Unless fairly accurate information can be obtained on each of these points the treatment must be hazardous. It is this last point that is most frequently overlooked, and possibly the most important criticism of our treatment of myocardial lesions would be that we are somewhat inclined to neglect any attempt to discover the cause of the lesion, to discover whether it still exists, whether it can be removed, and thus by appropriate measures endeavor not only to restore the heart as much as possible, but also to prevent a renewal of the injurious influences or reduce them to a minimum. It must not be forgotten that many of the waste substances formed within the body are muscle poisons, and that a failure in elimination must therefore be associated with an amount of injury to the different muscles, varying in degree with the intensity and character of the toxic process. Thus in the ordinary bilious attack the patient complains of the muscular weariness in his limbs and the inability, or at least disinclination, to undertake anything requiring physical effort; but it is equally certain that the myocardium also suffers, for the disturbance is always associated with changes in the frequency, tone and rhythm of the pulse. Should this lithemic condition persist for a length of time it is to be expected that functional, and it may even be marked nutritive changes will result, especially when it is borne in mind that the contractile power of the heart is an inherent property of the cardiac muscle fibre, and consequently that anything which interferes with the nutrition of these fibres must disturb their functional activity. Furthermore, it is a well-established fact that the secretions of various glands have a distinct influence upon the heart and that changes in their structure are associated with grave cardiac disturbance; also, there is reason to believe that certain tumors in remote parts of the body tend to produce degenerative changes in the myocardium.

In the face of such facts it is very evident that the treatment of heart disease must have a wider scope than the use of remedies directed to the heart alone, and it is in illustration of this line of thought that the subsequent cases and criticisms are presented. They have been arranged in four groups: (1) Myocarditis due to defective metabolism as a result of disturbance of the alimentary system; (2) cases due to disorder of internal secretions and excretions; (3) cases where the myocardial disturbance is associated with the existence of a neoplasm in some other part of the body; (4) myocarditis as the result of specific

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infectious diseases. The first series of cases illustrates the influence of defective metabolism in producing cardiac disturbance or aggravating an existing lesion.

Case A—A professional gentleman, 50 years of age. Always had been a total abstainer from alcohol and tobacco; the only sickness he had had was typhoid fever, which antedated the very early sensations of cardiac discomfort by eight years. The patient never had been robust, but was of exceptionally active habits, and a great portion of his time was spent in the open air. He stated that for three years he had suffered with angina pectoris, and that during the last eight or nine months they were a daily occurrence. Trivial exertion, such as walking up a slight incline, would induce an attack, and frequently he had to sit down in a store or upon a doorstep until the pain passed away. Examination showed the pulse regular but slightly below the average strength, the radial arteries were healthy, and careful examination of the superficial vessels failed to show any signs of arterial degeneration. The heart was normal in size, and the only change that could be detected was a diminished intensity of the sounds, with an occasional systolic murmur in the mitral area. His family physician had examined the urine repeatedly, and always found it normal, with the exception of a frequent excess of amorphous urates. The patient had been unfortunate in his medical attendants, as his first physician left that part of the country, his successor died within a year, a local consultant shared the same fate, and the patient ultimately passed into the hands of a young physician, who was hampered by all the traditions in treatment handed down to him from his predecessors by the patient, without any explanation as to why such a line of life had been laid out; and the embarrassment was still further increased, as it was said to be the result of a consultation which was participated in by a well-known European specialist whom the patient had the opportunity of seeing upon two occasions. Under such circumstances the attending physician was loth to make any changes in the general treatment, although the diet puzzled him very much, as it was exceptionally abundant in the amount of nitrogenous food allowed, while the urine indicated that nitrogenous metabolism was imperfect. The close resemblance to a strict diabetic diet led me to ask the patient whether sugar had ever been found in his urine, and he replied that at the first consultation a trace was detected, and this diet was prescribed. A second examination, made forty-eight hours after the first, failed to discover any sugar, but nothing was said about the diet, and the patient not knowing why it was prescribed, persisted in its use for more than two years, under the belief that it was given for the relief of his cardiac pain. As his physician sickened and died a few days after the consultation above referred to, there was not anyone to correct the mistake.

We at once advised a mixed diet, in which the proteids were diminished, gave the patient a mercurial and saline every other day for three doses, then ordered him seven minims of wine of colchicum, three times daily for about a month, and subsequently he took arsenic and strychnia. The patient began to improve after the first purgative, and at the end of one week could take more exercise than was possible at any time during the preceding two years. He still lives, and continues in the active pursuit of his profession; and although examination shows that his myocardium is weak, he very rarely shows any symptoms of angina, and never experiences the severe suffering which was a frequent occurrence four years ago. I feel sure that but for the unfortunate chain of events which led to his persistency in an injurious dietary for more than two years, his recovery would have been more complete.

Case B belongs to the same class. Briefly stated, the patient was a merchant, 56 years old, but prematurely gray, with well-marked arcus senilis and thickened arterial walls. I was called to see him on account of acute angina attacks, and failed to detect any change in the heart except the accentuated clanging sound in the aortic area (toomp) so frequently heard in cases where there is thickening and slight dilatation of the aorta. Notwithstanding the free use of nitro-glycerin and morphia, together with the administration of iodides and arsenic, the attacks increased both in severity and frequency until the patient dreaded to go to bed, because after a short sleep he would awaken in great pain and have to spend the remainder of the night sitting in his chair. This continued for more than two weeks, when, as he had been taking about a grain and a half of morphia daily, it was thought advisable to give him five grains of calomel, and, to the surprise of everyone, the pain ceased as soon as the calomel acted.

Case C—The third case of this class was a patient 52 years of age, a habitual drinker of whisky, who was suffering from a combination of hepatic cirrhosis and mitral incompetence. The mitral incompetence was of very old standing, but had not given any trouble until during the three years prior to my first visit. Upon examination the patient was found to have a considerable degree of ascites, together with so much dropsy of the lower limbs and feet that he had to wear felt slippers instead of his usual

leather shoes. The heart was enlarged so that the apex beat was in the usual interspace but nearly one inch outside the nipple line, and a long systolic murmur could be easily detected in the mitral area. The pulse, moderately full, and although of less than normal tension, was still very much better than one would expect from the dropsical and dyspnoic condition of the patient. The superficial abdominal veins were large and prominent, and although considerable ascites was present, the regularly enlarged and tender liver could be easily palpated when the patient was lying upon his left side. There was a small amount of albumen and a few hyaline casts in the urine. The patient informed me that the dropsical condition had existed for more than a year, during all of which time he had been under treatment, the chief remedies having been digitalis, strychnia and purgatives. The case seemed to be so well suited for digitalis that I prescribed it again, under the belief that the former preparations of the drug had not been reliable; but there was very little improvement at the end of two weeks, and consequently the pill of digitalis, squill and blue-mass was substituted during one week without obtaining any better results. This experience, together with that of his former attendants, and the fact that the pulse tension, although below normal, was much better than one would expect in such a dropsical condition, suggested the idea that many of the symptoms which had been attributed to the heart were really due to the hepatic cirrhosis, and that the debilitated condition of the heart itself was probably due to the influence of toxins derived from this same source. All cardiac tonics were therefore abandoned, and the patient was given two grains of calomel three times daily for several days until there were signs of approaching ptalism. Under this treatment the dropsy rapidly disappeared, chiefly by diuresis, the liver became smaller and lost its extreme tenderness, the area of cardiac dullness diminished, and the force of the cardiac contractions increased. Subsequently the patient was given one-fortieth of a grain of strychnia four times daily, and advised to take two grains of calomel once a week for one month. He is now in excellent condition, and has been able to work upon his ranch. The liver is still larger than normal, and the mitral murmur more pronounced than formerly, but this is what one would expect in a valvular murmur when the force of the myocardial contractions had been increased.

Case D—The fourth and last case of this series was noted in a man 50 years of age, who had incompetence of the mitral valve since boyhood, but muscular compensation had been perfect so that he could ride a bicycle or take part in active sports, such as lawn tennis, without suffering any inconvenience. There was a distinct history of gout in his family, although he never had suffered from it. About one year before I saw him he broke down in health, probably from worry and overwork, became very nervous, had frequent attacks of palpitation, lost consciousness on several occasions, and developed other symptoms which suggested the Adams Stokes syndrome, but he could not tell me whether they had been associated with bradycardia. When he walked three or four blocks he had to stop and rest, not on account of dyspnea, but rather because of a sensation which he said was "not pain, but a feeling as if he were tired in his chest just below the breast-bone." The right side of the heart was slightly enlarged, and there was a distinct mitral systolic murmur. The superficial arteries were thickened, but not to a great degree; the pulse was regular, of good tone and volume, and generally averaged from 65 to 70 beats per minute when the patient was at rest. The liver was enlarged. There was not anything abnormal in the urine. My first impression was that the distress was a form of angina due to the changed condition of the blood vessels, and consequently nitro-glycerin was prescribed in doses of 1-100 grain three times daily; but this only succeeded in giving the patient violent headaches, which persisted so long as the drug was continued. The next idea was that his exhausted nervous system was responsible for the trouble, and that all his symptoms might be due to neurasthenia; but rest and bromides failed to give any relief. Strophanthus relieved the attacks of palpitation, but did not improve his condition. It was then discovered that the patient had suffered from hemorrhoids since he was a very young man, and that they bled frequently; furthermore that the present sickness commenced from the time that the hemorrhoids had been removed by operative procedure. This coincidence, together with the gouty history, dietetic habits of the patient, and enlarged liver, awakened the suspicion that cardiac distress might be largely due to imperfect metabolism consequent upon a portal congestion which therefore had obtained relief through the bleeding hemorrhoids, and that those products of this faulty metabolism were acting as toxins upon a circulatory apparatus which the patient's time of life, diathesis and pre-existing lesion had rendered more than usually vulnerable. One-quarter of a grain of mercury proto-iodid was prescribed three times daily with such satisfactory results that when the patient was seen forty-eight hours later he said, "Doctor, you have hit it this time." He improved rapidly, and frequently walked a distance of between three and five miles; but a change of residence removed him from my care, so that I am not able to furnish further information except the fact that three months ago he wrote to me saying that he was in fair health and able to attend to business.

These four cases are fair examples of what is sometimes described as gouty heart, not because the patient actually suffers from gout, but on account of the relation that is supposed to exist between it and lithemia; in the majority of the cases belonging to this class lithemia is a frequent symptom, but the connection between the two conditions must await a more perfect knowledge regarding the pathology of gout. All we are warranted in saying about lithemia is that it appears to be particularly associated with defective oxidation of nitrogenous food or tissues, and that this should not be attributed merely to functional inactivity of the liver, as was originally suggested, but may also have its origin in excess of nitrogenous food infested, or imperfect digestion in any part of the alimentary tract, so that the food enters the portal circulation in a condition in which hepatic digestion is impossible, and thus acts as an irritant to the liver tissue. Should the consequent impaired hepatic function result in the passage into the general circulation of material that should have undergone further transformation by action of the liver cells, there is every reason to believe that such substances will act as toxins, because it has been shown experimentally that if an anastomosis is established between the portal vein and the general circulation, of a dog, death soon ensues. The idea therefore is that as a result of imperfect nitrogenous metabolism the blood becomes surcharged with nitrogenous waste material which has a toxic influence upon the tissues generally, including the heart; and not only may direct injury be done to the myocardium, but those same toxins tend to raise and maintain a high blood pressure which by and by produces tissue changes in the arterial walls.

It may be argued against this that there are many dyspeptics who have not any heart trouble, or at most a reflex palpitation, and consequently if imperfect metabolism be the cause, or a contributing cause, of the cardiac changes above described, they should be much more common among dyspeptics than they are. The answer to this is that the patient who primarily suffers from gastric dyspepsia is not at all liable to become a victim of imperfect nitrogenous metabolism, because the immediate gastric distress compels him to eat with great moderation, and only substances which can be easily digested. The man who is most liable to suffer from imperfect metabolism is the one who has an appreciative palate and whose stomach, so far as he can judge by his sensations, is capable of digesting all that he swallows; a man's digestive power is not the indication to the amount of food he requires, and just as the dyspeptic may suffer from inanition because he cannot digest enough to supply the wants of his body, so may the other, by using his palate and freedom from gastric distress as guides to the amount of food he should take, ingest more than can be assimilated and consumed in the ordinary wants of the body, and thus have his circulation overcharged with waste nitrogenous material. The four patients that I have referred to were good eaters, two of them were very hearty eaters, and my experience has been that all patients suffering in a similar manner were or formerly had been good feeders.

In people of such dietetic habits there is a tendency to keep the blood continually loaded with a large amount of nitrogenous material, and when a man is young and of active habits much of it is utilized for purposes of tissue growth and repair, so that the injurious effects are delayed or avoided; but soon after reaching adult life the social responsibilities and changing inclinations are generally accompanied by a great diminution in the amount of exercise taken, and a consequent diminished necessity for such a large quantity of food; nevertheless, our customs are such that at this time of life eating becomes one of the social features of our existence, and the dietary,

instead of being reduced, is in many cases rendered more difficult. The cardio-vascular changes consequent upon such habits proceed very gradually, and at first imperceptibly, so that the earliest warning of mischief may be an attack of palpitation or precordial distress after a meal that formerly was borne without discomfort, but which is now made intolerable by the incipient degeneration in the heart and blood vessels. After this an improved diet may prevent future attacks, but the early symptoms may have been ignored or misinterpreted so that the heart remains permanently weak and the progress of the ordinary senile changes in the myocardium and arteries is accentuated. The fact that only a comparatively small proportion of people who over-eat suffer from cardiac disturbance does not in any way invalidate the truth of what we have just said; we cannot tell why one man's heart suffers, while that of a gourmand escapes, any more than we can explain why in one man the moderate use of alcohol is followed by nephritis while it not frequently happens that the kidneys of a comparatively excessive and regular drunkard escape injury. All we can say is that each individual has an idiosyncrasy according to which the functional capabilities of his different organs and their susceptibilities to injury vary from those of another, a fact that has been recognized by the laity for centuries and recorded in the homely saying, "One man's meat is another man's poison."

It appears to me that the recognition of the noxious influence which chronic deficient metabolism may have over the heart is of very great importance. A review of past experience brings to my mind more than one patient who complained of subjective cardiac symptoms, but where careful examination only revealed a slight chronic congestion of the liver; yet in some cases a few months later, in others three or four years later, the patient returned with unmistakable evidences of dilated heart and chronic myocardial change. These patients I had originally sent away with the assurance that they need not worry, as their hearts were all right, and as there were not any marked symptoms of gastric indigestion, but simply a slight persistent enlargement of the liver, no special instructions regarding diet were given. Of late years I have learned to view such patients with some anxiety, and not simply to pass them by as victims of an overwrought nervous system who only required reassurance.

While the object of to-day's lecture is to discuss these cases in which the cardiac changes are secondary to disturbed alimentation, it is always well to bear in mind the fact that a similar condition occurs where the heart lesion has been primary and failure of compensation leads to passive congestion of the portal circulation with consequent embarrassment of the functional activity of the entire digestive apparatus. A heart should not be regarded simply as a central organ which when out of order produces disturbances in other organs; it should also be remembered that the disordered viscera reflect injuriously upon the welfare of the heart itself, and that any general disturbance of the circulation must interfere with the nutrition of the heart. It therefore follows that not only must the heart itself be treated, but secondary disorders in other organs must be removed simultaneously if compensation is to be restored.

The treatment naturally is considered under the head of diet, exercise and medicines, and, as in this particular group of cases we are dealing with maladies originating in disordered nutrition, we shall discuss the diet first as it is of paramount importance. Since the maladies appear to a great extent to originate in disturbed proteid metabolism, it might seem that the whole matter could be very easily adjusted by reducing the amount of nitrogenous substances ingested, but unfortunately the problem is rarely capable of such easy solution because trouble is not

always due to an excess of nitrogen ingested, but more frequently to interference with its digestion and assimilation, and consequently it behooves us to find out where the flaw is, whether it lies in an excess of nitrogenous food, or the form in which it is taken; or the nitrogenous food may be all right, both in quality and quantity, but the hydrocarbons and carbohydrates are in excess or of such a nature that they disturb digestion and thus prevent the digestion of an amount of proteid material that is absolutely necessary to the best welfare of the patient; or there may be changes in some of the viscera, such as cirrhosis of the liver, which diminishes the activity of the organ, and imperfect metabolism results. The diet therefore should only be prescribed after a careful inquiry into the patient's habits as to food and drink; let him state distinctly the kind of food and the amount of each that he takes at breakfast, lunch and dinner; he must also say how many hours elapse between meals, and whether he is in the habit of eating or drinking between meals. It is only thus that it is possible to determine what constituents of the dietary are responsible for the symptoms and physical signs presented by the patient.

In arranging a diet for these patients it must be remembered that we are dealing with pathological conditions, and therefore that in many instances the ratio of foodstuffs to one another cannot be maintained; also that the quantity must vary with the amount of work which the patient has to perform. Some idea, however, of the approximate amount of food that we should allow the patient, were he in health and following his usual vocation, is of use in enabling us to form an estimate of whether the patient is eating a proper quantity, and how much we should allow him. My usual way is to figure on the basis that a man should have a total daily allowance of food amounting to 1-30th to 1-25th of his normal body weight. The latter quantity is only for those who are doing active bodily work requiring muscular exertion, and consequently, as patients suffering from the maladies we have under discussion are generally passed middle life and not given to muscular effort, the first figure is more frequently appropriate to that age. Again, more than half of this allowance should consist of inorganic food (water and salts), the remainder of organic food (animal and vegetable food), and animal food should comprise only 1-4th of the organic food. Thus a professional man over fifty years of age and weighing 180 pounds would be entitled to 6 lbs. of foodstuff daily, of which $3\frac{1}{2}$ lbs. would be inorganic and $2\frac{1}{2}$ lbs. or 40 ounces organic; the organic would consist of 10 ounces meat (this makes an allowance of about 20 per cent for water in the form of bone, etc.) and 30 ounces vegetables, bread, etc. Nearly every person can tell us approximately the weight at which he feels in best condition, and this I call his normal weight, and upon it base the calculations for his diet. This I have found to be more satisfactory than any system which makes the amount of food the same for all men, irrespective of size and individual idiosyncrasy; we must remember that it is natural for some men to be stout, and any attempt to reduce them below a certain weight is accompanied by poor health, while others are naturally of a spare build, and attempts to fatten them are not only futile, but induce gastric disturbance and general malaise.

Having in this way obtained an approximate idea of the quantity of food necessary for the individual patient, we can compare with it the amount which he is accustomed to eat daily, and see whether there is anything wrong in the total quantity or in the proportions of the different varieties; errors in either of these respects must be corrected, and it will be necessary to make special modifications where there is disturbance of the digestive viscera. Thus, as in case "C," where the whole alimentary system was

"on strike," it may be necessary to put the patient on milk diet until there are indications of a peaceful settlement and a return of more harmonious action; but in cases such as "D," where digestion was good and the man was eating excessively of all kinds of food and too much albumenoids (he ate meat at every meal), it was only necessary to curtail and rearrange his whole diet.

While it is therefore necessary to arrange the diet according to each individual, there are certain instructions which may be given to all regarding articles of food to be avoided, intervals between meals, and other matters that are of great importance to secure perfect digestion and metabolism. (1) The daily amount of food should be divided into three meals, all nearly equal in quantity; but the articles that are most difficult of digestion should be taken at the midday meal, and the lightest in the evening. The custom of making one very hearty meal in the day, especially in the evening, while breakfast consists of a little fruit, and lunch of a cup of soup and a biscuit, is to be condemned, both because it overcharges the blood with a large amount of nitrogenous waste at one time, and also for the reason that stomach will not have time to complete digestion and empty itself before the patient retires to rest; if on the other hand, the amount of food is divided up more equally throughout the day, then the waste matter in the circulation is never more than can be excreted. (2) The meals should never be less than four hours apart, so that the stomach can empty itself and rest for some time before it is called upon to dispose of more ingestion. (3) No food should be taken between meals. (4) A glass of hot water should be taken every night upon retiring, as this is the best way of flushing not only the stomach, but also the liver. (5) Alcoholic stimulants should be avoided, if possible, but if they must be given, then whiskey and water, or a light Moselle wine are to be preferred. Champagnes, sweet or heavy wines should be forbidden.

Exercise is beneficial in the treatment of this malady, not only on account of a direct influence upon the heart by increasing circulation through the coronary arteries, and thus promoting the nutrition of the myocardium, but also for the reason that the respiration and general circulation are improved so that metabolism is more complete and the whole body benefited. Yet a little common sense must be used in prescribing exercise, for many patients require rest, and in all the amount of exercise must be carefully regulated, as much harm has been done by its injudicious use. It is an unfortunate fact that there are many extremists in medicine who pounce upon everything new in the way of treatment, apply it to every case indiscriminately, and bring it into disrepute. Stokes, who was one of the earliest to recognize the value of this therapeutic method, went so far as to compel a gentleman suffering from aortic regurgitation to run behind his own carriage; under the fresh impulse given by the writing of Oertel, many patients were inadvisedly urged to efforts which only resulted in their complete undoing; and within the last few years we have all seen how the Nauheim treatment introduced by Schott has, in the hands of many, become nothing more nor less than a professional fake. Exercise never should be prescribed until by observation the capabilities of the myocardium have been fairly estimated, and then a very sharp line should be drawn between exercise and exertion.

The amount of exercise to be allowed must be estimated according to the individual ability of each patient, but in all of them everything approaching effort, especially sudden effort, should be absolutely forbidden; apart from this the best guide is the production of dyspnea. It is better to tell the patient that any tendency to breathlessness means that he

is doing too much, and consequently that he must rest until fully recovered, and then continue more slowly. This is very important, because there is a very prevalent idea among young men and boys with athletic aspirations that they can "improve their wind" by persisting in an effort when their hearts are already taxed to the utmost limit; and unfortunately the same notion exists among men of middle life who have become fat through overeating and sedentary habits, so that they undertake some task for which they are wholly unprepared, and bring on an attack of heart failure which not infrequently proves fatal. Those patients who cannot take a few steps without inducing dyspnea are not fitted for active exercise, and must be treated by rest, massage and passive movement until the myocardium has recovered sufficiently to permit the employment of resistance movements, and subsequently light forms of active exercise may be prescribed. The Nauheim treatment, with its combined system of baths and gymnastics, is particularly well adapted to this class of cases, not only because of the direct influence upon the heart and blood vessels, but also for the reason that the improved circulation, through the lungs, liver and kidneys, indeed throughout the entire body, conduces to more perfect metabolism and elimination of waste material, and in this way attacks the disease at its origin. Much discredit has been brought upon this method by the haphazard way in which it is sometimes carried out; for while there is only a small proportion of patients to whom it will not be of at least temporary benefit, still there are a few to whom it is wholly inapplicable; furthermore, what is equally important, the directions regarding the strength, duration and frequency of the baths, as well as those relative to the extent and character of the gymnastics, should be the result of a study of the capabilities and requirements in each case, and not simply a perfunctory turning of the patient over to an attendant, with the instructions that he is to have a Nauheim bath, as if it were of no more importance than having his face sponged.

(To be continued.)

TREATMENT OF TYPHOID FEVER.

OUTLINE OF TREATMENT AND RESULTS IN SOME OF THE CASES OF THE PALO ALTO EPIDEMIC OF 1903.

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THE OBJECT of the present paper is to give in some detail the treatment of the cases that came under my observation during the epidemic at Palo Alto and Stanford University last spring. Some unusual opportunities were presented to observe, within a short space of time, a considerable number of cases, and as a fairly uniform plan of treatment was adopted and seemed to be generally successful, it may be of value to review it. In the first place some of the difficulties to be met with should be mentioned, for, just as this epidemic came down suddenly upon a wholly unprepared community, so may almost any other community, large or small, be suddenly called upon to face a similar situation. Particularly is this true with our present "happy-go-lucky" control of water supplies, dairies, vegetable gardens, oyster beds, etc. A university community is especially unfortunate when called upon to meet a typhoid epidemic, as it contains so many individuals of susceptible age, the majority of whom are living away from the ordinary facilities of home in the matter of protection, nursing and food. Besides, students are very prone to take poor care of their health, and so pay but little attention to such symptoms as frequently inaugurate typhoid fever.

I have briefly traced the general plan of management adopted in the present epidemic.* Where no hospital facilities are to be had they must at once

be instituted for the proper care of typhoid fever. I am fully convinced that the most essential thing in the treatment of typhoid is prompt recognition of the condition, and immediate rest in bed, with proper food and care. Without exception, the fatal cases and the most serious ones that came under my observation, were in persons who had, for one reason or another, kept up and about and eaten improper food after the onset of the symptoms. This was particularly striking in some of the fatal cases. For this reason, above all others, the typhoid fever suspect must at once, and with as little transportation and strain as possible, come under proper care, and stay there until freed from the suspicion of the disease or well again after the fever. In the present epidemic we found it very convenient to group the patients in certain houses or portions of buildings used for residence (dormitories, for instance), and to organize there an emergency hospital, with trained nursing staff and equipment.

Where this was not possible, and cases could not be sent to the hospital without serious risk, they were treated where they were when taken ill. In every case where a typhoid suspect or patient is transported, he should be treated as an ambulance patient in every sense of the word. A trained nurse is indispensable in the care of a typhoid case, from the standpoint of the patient, the family, the community, and, above all, the physician himself. The cases considered in this paper were all cared for by trained nurses, sometimes three for one patient, and sometimes two or more for several patients. One great advantage offered by the grouping of cases together, is the opportunity for several nurses to be present in case of an emergency. Each nurse, whether at a private house or in an emergency hospital, had at her command written orders for everything that was to be done, and was supplied with an emergency outfit for collapse, hemorrhage, perforation, etc.; written instructions of what to do for expected complications, and a list of the more prominent symptoms of each were given her. For every case of typhoid it may seem exaggerated care to have on hand and ready for immediate use the necessary drugs for the various complications, a simple saline infusion outfit, etc., but it saved several lives for me in handling these cases, and I have a wholesome fear of the drug-store delay. It is not only ideal, but absolutely necessary to give each private patient the advantages that come with a well-equipped hospital.

The first and last great problem of every typhoid case is the selection of proper food from the onset of the symptoms until complete health is restored, and that is, as a rule, not until several months have passed. Whenever possible, good unskimmed milk was given. The patient must be carefully studied as to milk digestion. Some did better with two-hourly feedings, some three-hourly or four-hourly; some could best be fed throughout the night; some required a long interval of rest for the stomach. No absolute rule could be laid down as to quantity or intervals of feedings.

A careful study of general nourishment, stools, tongue and abdomen soon makes the best plan clear. Various measures were adopted to suit the milk to the individual taste and digestion of the patient. I learned to look with great concern upon the patient who, in spite of various modifications, was never able to digest milk properly. The addition of limewater, sodium bicarbonate (sol. 5i to Oii) in varying amounts; peptonization, the breaking up of the curd by means of small amounts of babies' foods, the simple dilution with water, the use of broken-up junket, often aided in accommodating the patient to milk. In other cases small amounts of coffee were useful in increasing the palatability of the milk, and the contained caffeine had a satisfactory systemic effect. Toast-milk, made by pouring hot milk over thoroughly browned toast and carefully straining it;

*Occidental Medical Times, July, 1903.

or celery-milk, made by similarly adding some juice from boiled celery, often served a similar purpose. Cocoa or chocolate was badly borne in a number of cases that came under my observation in the practice of others, so it was not used by me even during recovery. There is no question in my mind that milk in some form can properly nourish the great majority of typhoid patients, and that before it is discarded as a diet, a most careful trial of it should be made. A most important point is to know when to stop the milk and begin to give other articles of food. The constant call of the convalescing patient is hard to resist, but must be put off in most cases until ten days or two weeks have elapsed after the febrile stage. In some cases any simple food might do well, but if it does not, the blame falls upon the physician, and it is hard for him to disclaim it. Theoretically, any finely divided food, or even masses of soft food, are in practically a fluid state when they reach the affected part of the bowel, and many physicians have used various forms of food freely; but it seems to me from observing the present cases, a much safer course is to allow no food that will not pass through a very fine strainer, to enter the bowel until two weeks free from fever have elapsed. It is hard to tell just what the exact state of stomachic and intestinal digestion is in a case of typhoid, and it is well to give the patient all possible advantage of the doubt. Two young patients under my care had just begun to convalesce at the same time, when they were given some simple cereal food by stealth, and they immediately had relapses more serious than the original run of fever.

In some cases when milk was not well borne, an ice cream made as follows was used with much success: $\frac{5}{8}$ i milk, $\frac{5}{8}$ ii cream, sugar to faintly sweeten, vanilla flavoring, and frozen solid. This was usually the first food permitted during the recovery stage in all of the cases. If it was well borne, then the following foods in order given: (1) junket; (2) broth; (3) a thin, thoroughly cooked, well-strained oatmeal or farina gruel (boiled two hours), given at first once a day, and then gradually twice a day; (4) a small piece of thoroughly dried toast; (5) some well-cooked rice; (6) a little custard; (7) the juice of a chop; (8) a soft-boiled egg. Then there was a gradual resumption of a simple diet. Careful observation by the physician of the food given must be maintained, as cooks, mother and nurse may not appreciate the need of prolonged cooking.

When discharged, each patient was given a diet list, stating upon it when the different foods could be resumed, the aim being to avoid all indigestible foods and all foods with a marked residue for at least three months. Pieces of gristle and fresh fruit were particularly forbidden. The value of a simple diet for some time after typhoid is often not appreciated; good wholesome food with nourishing properties is required, but the future health of the patient, particularly as regards his digestive system, can be seriously endangered by the temptation to over eat and by the eating of indigestible foods during the somewhat unstable condition of the alimentary canal that follows typhoid. The avoidance of constipation is particularly necessary, and convalescent patients seem to be subject to hemorrhoids. During the epidemic, two patients came to me only because of hemorrhoids. They had evidently had a mild attack of typhoid infection for some weeks. Because of headache and digestive disturbances, they had eaten carefully, but had had great trouble with constipation. Both had partaken of infected milk, and their temperatures were subnormal. Careful feeding and rest soon helped them generally, but with one, a slight operation was necessary to relieve the moderately severe hemorrhoidal condition.

When milk could not be taken, recourse was had to mutton and chicken broth, beef juices, barley broths, etc., but nourishment was never satisfactory.

The various peptone preparations are of great value for a short space of time when milk must be stopped because of hemorrhage or perforation, but even here they have a real danger in that they often soon exert a laxative effect upon the bowel. It was of interest to note that in the postmortem of patients able to digest milk, ample body fat was found, but in those kept on the other foods mentioned, the body fat had largely disappeared.

Water.—When possible, large quantities of water, cold, slightly warmed or hot, were given, up to the amount of two gallons in twenty-four hours. This was usually possible without disturbing the digestion by giving the half an hour or so before the feedings. It usually left the stomach promptly, judging from the amount of gurgling to be heard in the region of the stomach soon afterward. In a toxic disease such as typhoid, the value of additional body fluid as an aid to elimination seems indisputable. In cases where water was not well borne by the stomach, careful rectal injections of normal saline infusion were readily absorbed, and had a favorable effect upon elimination, particularly by the kidney.

Grape Juice.—Frequently during the course of the fever, and particularly afterward, the addition of a small amount of unfermented grape juice, either that of the Concord grape or the California brand, was very acceptable to the patient, and aided in taking the water. Particularly was it found useful in the stage of decreased urinary elimination that was frequently observed in the convalescence. In some cases, even when the urine was reduced to 10 ounces in twenty-four hours, it had a most prompt diuretic effect, particularly when used at the same time with coffee in the milk given as food.

Antipyretic Measures.—In all of the febrile cases, an attempt was made to control the temperature by some form of bathing or the administration of external cold. In a majority of the cases, the abdominal coil, with an ice bag for the head, was used. The coil was usually well borne, and had a satisfactory effect upon the temperature. Frequently a piece of gauze is needed between it and the skin, especially with fat persons, in whom the abdominal wall is prone to freeze enough to slough. Two tubs were used, and iced water circulated slowly through the coil. It was found of great advantage to put a funnel covered with gauze over the receiving tube to keep out the dirt contained in most ice; and when the tube became stopped up, a foot bicycle pump promptly cleaned it out. When properly managed, a hard rubber coil is easily handled, and is a comfort to the patient and nurse rather than a source of annoyance. The coil should be carefully selected in order to avoid the soft rubber so often sold. Usually the coil was left on when the temperature was over 100° F. If, in spite of the coil, the temperature rose to over 101.5° F to 102° F., a cold or tepid sponge was given. If it rose still higher, an ice sponge with much friction; if still higher, an ice pack with friction. No tub baths were used or found necessary, and I dread for a typhoid patient the amount of necessary manipulation that a tub bath necessitates. The ice pack did well with the highest temperatures, and was particularly effective when the nervous symptoms became unduly exaggerated. As a rule, it was not found to be depressing to the circulation, although a stimulant was usually given during or following it. The results obtained from its use were at times most striking, particularly when delirium, subsultus tendinum, and even general convulsive body movements resisted other attempts to control them. Particularly was this sedative effect noticeable upon an unusually strong athlete, who, in spite of the efforts of three or four nurses, would get out of bed and walk around whenever his temperature rose to 104°. Wrapping a patient in a sheet wrung out of ice water was frequently resorted to in the very nervous, especially the delirious cases, to induce sleep, and was usually

successful. The presence of pneumonia, or even double pneumonia, was not allowed to interfere with the use of the various applications of cold for the reduction of temperature. But in the patients subject to collapses, great care was found to be necessary in the use of all measures for controlling the temperature, and frequently it was found to be safer to leave off the cold entirely while the danger of collapse seemed imminent. But this was true only to a certain extent, for in the febrile cases, with collapses, when a temperature of about 104° was reached, the collapses were more apt to appear, and so all moderate means to prevent so high a temperature were used.

The question of the increased danger from hemorrhage in the use of the abdominal coil is of interest. Of the nine cases of intestinal hemorrhage that came under my observation, three patients never had the coil used upon them before the hemorrhages took place. The six cases of hemorrhage where the coil was used were all very severe cases, and I thought the coil of great advantage rather than harm, and that it limited the flow of blood. When the hemorrhages did occur, the coil was at once reinforced by a second coil on top of it, or several large, flat ice bags, or both. Such treatment was evidently effective.

Use of Drugs: Intestinal Antiseptics and General Measures.—The selection of a routine drug for typhoid fever, for the purpose of general intestinal antiseptics or for a direct effect upon the typhoid bacillus in the body, is a matter that comes up in every case. It seems clear to me that, until we have proper anti-typhoid serums, we cannot hope to administer any drug, particularly by mouth, that will directly affect the active typhoid bacillus. We may be able to get into the bowel a chemical substance that will destroy the free bacteria there without injuring the intestinal mucous membrane, but we certainly cannot hope to reach the bacilli in Peyer's patches, and those buried in the mucous membrane. These are the ones that are doing the damage. The best that we can hope for at present is a moderate control of the general fermentation, particularly the exaggerated fermentation frequently accompanying the disturbed intestinal digestion of typhoid. This should, when needed, be attempted in each case; but the greatest care is necessary in the selection of a drug for routine use, because the body has enough to do in combatting the toxins injuring and damaging its various cells and tissues without adding depressing or irritating drugs to hamper the heart or injure the kidney. The array of so called specific drugs with which a physician, in a community where typhoid is prevalent, is assaulted from various sources, particularly pharmaceutical firms, is astonishing. In many cases I found that no drug treatment was good treatment; but in others, where the intestinal disturbance was marked, I found that a capsule of salol gr. ii or iii, guaiacol carbonate gr. i to iii, given one to three times per day was of great service. But its administration was always carefully checked by urinary examinations, and I never felt secure or unconcerned in its use. In severe cases of fermentation with loss of bowel tone and distension of abdomen, almost uniformly gratifying results were obtained from the use of oil of turpentine given in an emulsion with compound spirits of lavender. The dose varied from a drop to thirty drops of the rectified turpentine. Its value, particularly combined with the external use of turpentine stupes to the abdomen, was frequently most striking, but the urinary secretion had to be carefully watched.

Stimulants.—In the majority of cases treated by me, brandy or whisky was used at some time during the fever, and frequently throughout the period of severe symptoms. Its value was often striking, particularly in cases where the general nourishment was

poor; where the pulse became thready and unsatisfactory, and where pneumonia was present. When beneficial, it had no bad effects that I could ascertain, even though taken in large amounts. It seemed to be readily consumed and of great general body help, as well as an aid to the cardiac muscle. In cases where its administration produced the series of symptoms that one sees from its use in healthy men, it was not found to be of much value, and was temporarily or permanently discarded. Giving it in milk was often unwise, as it seems at times to interfere with the digestion of the milk and to turn the patient against milk as a food.

Strychnin.—The value of strychnin in typhoid was frequently tested, and, while not without its dangers, was found to be of the greatest service. Particularly was this true for prompt stimulation when required during the fever, and for fairly regular administration, either in tablets or in a syrup with hypophosphates, iron, etc., during the convalescent period. In only one case did it seem to increase the nervousness; in most patients it rather lessened the nervous symptoms. Its great danger is its stimulation of peristalsis and the temptation to use it when the collapse following hemorrhage occurs. Its value in the treatment of collapse will be noticed under a later heading.

Caffein Citrate.—This drug, by mouth or hypodermically, was found particularly valuable as a cardiac stimulant and diuretic when the strychnin alone was not successful.

Sedatives.—The cold pack was the most uniformly successful sedative and hypnotic used. The best drug was heroin hydrochlorid gr. 1-24 to 1-12 given hypodermically. It was of the greatest value for hypnosis, but frequently quieted delirium and convulsive movements. Morphin was occasionally used, but not with gratifying results, for although it frequently helped temporarily, it seemed to disorganize digestion and increase the tendency to constipation so much that it did more harm than good. Heroin also is not blameless in these regards, but was found not to be so troublesome as morphin.

Chloretone, in doses of 5 to 30 grains, particularly when combined with sodium bromide, and given in a warm, small, mucilaginous, fairly high rectal injection, was frequently strikingly helpful and not noticeably depressing. In several cases when all other sedative measures failed, a hypodermic injection of 1-200 to 1-75 of a grain of hydrobromate of hyoscin had a prompt and most beneficial effect.

Enemas and Laxatives.—A most uniform manifestation of this typhoid epidemic was the presence of obstinate constipation. Its control was a matter of considerable concern. In many cases, small daily low injections of glycerin 1 oz., water 3 ozs., were alone required. In others soapsuds injections in somewhat larger quantity. Great care was taken not to use plain water, which merely distends the bowel, and depends upon that for the excitation of peristalsis, rather than on a chemotaxic effect, and also not to use too large a quantity or put it in too high. Where saline injections were given for general effect or to flush the lower bowel rather than to excite peristalsis, great care was taken not to have them given too high, too great in quantity, too rapidly or with too great pressure. The postmortem observation of a typhoid colon is sufficient to show that if distension did not directly induce hemorrhage or perforation, it could bring about marked changes in the repair of the ulcerated areas. In very obstinate cases of constipation, it was considered wiser to use a combined enema of turpentine 5i to 5iv, molasses 5v, Epsom salts 5ii to 5vii, and water 0ii, rather than to excite too great and continued peristalsis by large doses of cathartic drugs.

(To be continued.)

ECHINOCOCCUS OF THE LIVER—WITH REPORT OF A CASE.*

By CLAIRES W. MURPHY, M. D., Los Angeles

MY OBJECT in reading to you a paper on echinococcus of the liver is a selfish one. I wished to read the literature on the subject, and also to obtain your opinion and experience.

Osler reports only eighty-five cases in Canada and the United States. My own experience with the disease is one undoubted case of hydatid of the liver, and a possible one of the peritoneum, adjacent to the cecum.

The embryo of the tenia echinococcus of the dog when ingested by man is freed from its eggshell by digestion; then either enters the general circulation, passing thus to the eye, the brain, the kidneys, lungs, etc., or the portal circulation to the liver, or else makes its way through the intestinal wall to the peritoneal cavity, omentum or abdominal muscles. When implanted in an organ the hooklets disappear, and the embryo eventually becomes a cyst. This cyst, by its presence, produces an irritation that results in the formation, from the surrounding tissues, of a fibrous capsule or wall. The cyst wall proper is composed of an outer laminated membrane and an inner parenchymatous granular one. From the inner layer buds are protruded that form eventually daughter cysts; these finally become detached, and from their interior are developed granddaughter cysts. The fluid in the cyst is non-albuminous, clear and of a specific gravity of 1005 to 1009. It may contain sugar. Ordinarily the scolices and characteristic hooklets can be seen microscopically. The echinococcus may live many years. When it dies the cyst is converted into a putty-like mass, which may be partially calcified. Several years ago, in making an autopsy on a demented old man who had died from chronic diarrhea, I found a cyst containing granular putty-like material, in the neighborhood of the cecum, which I now think must have been of echinococcal origin. No microscopical examination was made. The cyst may rupture. If externally, this may result in a cure. Of course if it ruptures into a large blood vessel or the peritoneal cavity the result may be most serious.

Dr. Paul Bresee of Los Angeles reports to me three cases that he has seen. In two the patients expectorated large quantities of bile-stained pus which contained characteristic hooklets; both patients recovered. The third case was discovered in an autopsy. It was not suspected during life.

The seriousness of suppuration of the cyst varies. Many times it produces symptoms of pyemia; sometimes the symptoms produced are few.

The following case illustrates the few symptoms that may arise from the suppuration of the cyst:

Miss O., native of California, nurse, never had a pet dog. For a year she had some discomfort in lower part of the right side of chest. On six different occasions had severe pain in this region, with dyspnea and difficulty in raising right arm from side. These symptoms lasted for about three hours. Early in December she consulted Dr. John L. Kirkpatrick, with whom I saw her. At that time a fluctuating tumor, not painful, the size of a duck's egg, could be felt over the right eighth rib, in the middle axillary line. Temperature ran for three weeks from 99 to 100 degrees. She continued to work for three weeks, and then consented to an operation, in which I had the pleasure of assisting Dr. Kirkpatrick. The tumor contained pus. When cleaned out, a small opening could be seen in the costal space. Four inches of the eighth rib was resected. A large quantity of pus escaped. A hole in the diaphragm was found. Through this a large cavity, containing pus and laminated membrane, was emptied. Gauze was used for drainage. The hooklets were found. The patient seems to be practically well. Very little drainage of pus from pleural cavity.

Australia and Iceland are the two countries in which the disease is most frequently found. Sheepherders and men who are brought in close contact with dogs are prone to have the disease. In over 50

per cent of the cases of hydatid disease, the cysts are found in the liver. They are usually found on its convex surface. If in the right lobe, it pushes up the diaphragm, frequently perforating it, and thus entering the right pleural cavity. Large cysts, as a rule, would present the signs of a tumor of the liver. Small cysts produce few symptoms, and even large cysts, in this situation, and until they suppurate, may only produce feelings of weight and distress. If in the left lobe, a cyst will push up the heart, and there will be an increased area of dullness in that region. It may break through the diaphragm and open into the pericardial sac. If the cyst is superficial, hydatid fremitus may be produced. One hand is laid lightly over the tumor, while the other is used to percuss it. A trembling motion is felt for some time after percussion has ceased.

Urticaria often follows rupture or aspiration of the cyst. Great enlargement of the abdomen, with dullness extending toward and continuous with the liver, especially if it is of long standing, and the health is not impaired, is suggestive of echinococcus of the liver. Echinococcus of the liver has been mistaken for ovarian cyst, hydronephrosis, dilation of the gall bladder and empyema, or pleuritic effusion. The gall bladder secretion is mucoid, and the tumor is pear shape. In hydronephrosis, exploratory puncture may have to be employed in order to differentiate the conditions. In pleuritic effusion and empyema the process is much more acute, and the upper level of the area of dullness is concave, while in the hydatid it is convex.

Pancreatic cyst is formed much more rapidly than hydatid cyst; usually follows an injury, and as a rule starts from the tail of the pancreas; hence lies behind the stomach and in the left hypochondriac region. However, I have had one case of pancreatic cyst originating from the tail of the pancreas which simulated in every way an attack of suppurative appendicitis. It is easy to conceive that a pancreatic cyst which presents itself toward the right hypochondriac region might, from position, simulate a hydatid cyst growing from the under surface of the right lobe.

If the cyst is best reached through the abdominal cavity, it should be walled off from the balance of the peritoneal cavity by gauze, its capsule sewed to the incision in the abdominal wall, its cavity opened and the cyst's contents, including the fluid, membranes and daughter cysts, removed, and gauze drainage made.

If it has ruptured through the diaphragm, a sufficient opening should be made, by resecting ribs, to thoroughly drain the cavity. It is very important to remove all the membranes and daughter cysts. If this is done most of the patients recover.

[For discussion see JOURNAL, May, page 160.]

THE BOARD OF MEDICAL EXAMINERS.

Dr. John C. King, of Banning, gives his views of the members of the board in the *Southern California Practitioner*. Part of his paper is given below:

The new board met and organized on August 1st; an eclectic, Dr. Perce, of Long Beach, was made president. Dr. Perce is a large, affable, good-natured man, who does an excellent business. He is one of those self-made, practical fellows, not overburdened with collegiate culture. While his grammar is not irreproachable, his heart is in the right spot. His examination papers were practical, and his markings generous. If I were a candidate I would like the whole world to consist of Perces. His colleague, Dr. Mitchel, professor of practice in the Eclectic College of San Francisco, is a handsome man, clad in Prince Albert, very quiet, difficult to "size up." His questions on obstetrics were good. In marking he seemed disposed to give the candidate the benefit of any doubt.

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

Dr. Tisdale, dean of the Homeopathic College of San Francisco, was elected secretary. This officer is not allowed to participate in examining. Both the so-called sectarian schools are represented on the board by medical teachers. Our own school has ruled, so far, that professors in medical colleges must not be state examiners. Dr. Buell, of Los Angeles, the other homeopathic member, is a keen, clean, well-built gentleman; iron gray all over, from hair to trousers. Buell ranks high as a surgeon. He is a man one is proud to call "doctor," regardless of school. Dr. Buell conducted the examination in surgery. Dr. Cothran, of San Jose, is a new member. Tall, straight, dignified, with clean-cut features; a graduate of a California college; apparently a good representative of modern medicine. He did his work well and conscientiously. Dr. Lockwood, of Pasadena, is an alternate, but acted in place of Reinhart, of Berkeley, who is in Europe. From surgery to chemistry he is an all-around, well-qualified man. His questions on chemistry were models. None of them merely technical; all of them essential—genuine medical chemistry. Dr. Thorne, of San Francisco, is an old member. I am told he is respected by the united profession of that wicked city. The statement is no small compliment, because, so far as I could observe, the profession there is united in nothing else. Thorne is past middle age, an influential member, very just, I think, yet disposed to be very generous toward "old practitioners." And then Dudley Tait. It is said Tait is a Frenchman. At any rate, he looks it; neat, natty, impetuous, dictatorial, yet polite. For years Tait has led the fight for the medical laws. In the societies, in the police courts, before the legislature, on the board, above all things Tait has been a fighter. Not always tactful, disposed to be a trifle inconsiderate of others, yet always on top. The profession, not only of this state, but of America, is indebted to Dr. Tait. It so happens that fighters will tread on people's toes, and I opine that many sore digits would find relief if planted firmly in the slack of Tait's trousers. The doctor has been accused of rank fraud, of discriminating in favor of, or against, certain individuals, colleges and systems of medicines. I went to the meeting prejudiced against the fellow, and watched him closely. I liked him. In my judgment he was "square" and impartial. Personally I would not hesitate to appear before Dr. Tait for examination, granting, of course, that I know a great deal more than I do. The remaining member of the board, from Riverside county, conducted himself with the retiring modesty befitting a novice from the rural districts.

At our first meeting seven gentlemen were refused admittance to the examination because of defective credentials. Certain of them had crowded three courses into two calendar years by going from one college to another—perhaps by taking a summer course. In other cases the college of graduation had admitted them to advanced standing upon insufficient grounds—or the college of entrance had neglected to demand a diploma from a high school or its equivalent. So far as I could determine, all of these gentlemen had acted in good faith. In most instances their respective colleges were to blame. Competition had made them lax in fulfilling the requirements of their own announcements. For most of the seven the action of the board (which the law made mandatory, not optional), meant another six months' course. The seven represented a number of different colleges. In addition, the whole graduating class of Hahnemann College of San Francisco was refused admission to the examination.

I found it a pleasure to be a member of the board; to meet fellow-members, to observe the working of our more than excellent law, and, particularly, a pleasure to know positively that, regardless of difference of "school" and of opinion as to methods, etc., the spirit of the board was one of absolute fairness and perfect harmony.

SECOND ANNUAL MEETING OF THE PACIFIC ASSOCIATION OF RAILWAY SURGEONS—OFFICIAL MINUTES.

The second annual meeting of the Pacific Association of Railway Surgeons was held in the St. Francis Hotel, San Francisco, on August 17 and 18, 1904. The meeting was called to order by the president, Dr. W. B. Coffey of San Francisco, who read the following address:

Gentlemen: In calling this meeting to order, let me congratulate you at the goodly number present. It is an evidence of rapid development and augurs well for the future. A little more than a year ago our society had its conception, and at the meeting in 1903 it became a full-born, a full-fledged child. At that time I briefly outlined its purposes and objects.

Perhaps we have not as yet attained that degree of efficiency and usefulness which had been hoped for by its founders; but youth requires experience and ambition serves as a foundation for success. Let us hope, therefore, that the spirit of the beginning will be kept alive. Let ambition be our watchword, and that, added to energy and perseverance, will surely develop success.

It is not my purpose at this time to present you any treatise on some special subject, but rather to make some cursory and general suggestions of my conception of some of the duties and responsibilities of a railway surgeon in his relation with his employer, as also the traveling public. The occupation of a surgeon is a profession, not a trade. To attain his objects he should be not only a man of the highest character but of the most delicate feelings. In no instance can these traits and qualities be better exemplified and demonstrated than when called upon to examine and report upon the condition of one who has met with an accident and concerning whom a question of legal responsibility may arise. Such a patient often views a visiting railway surgeon with distrust. He is very prone to the opinion that you will minimize his injuries and will not approach you with that candor so necessary to make a true and honest diagnosis.

On the other hand the surgeon is the paid employee of the company, and presumably is enjoined to aggrandize its best interests. You can appreciate that under such conditions, his position is a delicate one. As a student between every line of the lectures given him are read the inculcations of morality. At every clinical demonstration is suggested that he discover and determine the exact truth. With these principles ever borne in mind, he should approach his duty unflinchingly. Examine and determine only as his best and honest judgment shall determine, and irrespective of responsibility, let it fall where such responsibility may.

There is another matter which I feel should not be passed without notice, and which in my judgment serves to demonstrate the qualities of a surgeon. I allude to the calls in emergency cases. This is a subject which should receive deep and earnest consideration at your hands. Experience has demonstrated that the first treatment has in many cases determined the final result. Those under the cover of a hospital with every facility that human ingenuity and skill can devise, with time and opportunity to diagnose and operate, are entitled to their full credit for success, but all praise to him who is suddenly called to the street or the road and with limited means or facilities, and only by his genius and professional acumen, stems the tide of maybe a fast ebbing life, and then hurries the patient on to a hospital where there is nothing left to be done but to complete the work so skillfully started. How aptly this is illustrated in compound fractures where the wound is covered with dirt, grease or other foreign substances.

Another illustration of responsibility is that which attaches to the selection of employees. Our duties in this respect are twofold, one to the company, the other to the public. There are no qualities so necessary to the proper performance of duty by an employee as that of the senses of sight and hearing.

As a train rushes along in its outward flight, the lives of the passengers are in the keeping of the crew of the train. They must be ever alert and watchful, and to be so they must be possessed of those physical qualities which conserve alertness and watchfulness, that is, acuteness of sight and hearing—there is where the surgeon should serve his employer well. Here is where there is also placed in his hands the obligation of anticipating not so much damage to the company, but appalling sacrifice of human life.

The careful study and consideration of deficiencies in this respect is an obligation that we cannot and should not avoid.

There are many more suggestions that I might make on the lines adverted to, but I feel that I might in a measure weary you. What is more, papers on various subjects and matters are to be read and I should not encroach upon your time unnecessarily. I have but one further suggestion to make, which occurs to me would not be remiss at the present time.

It is the experience of every one of us that cases constantly occur which from their character and their mode of treatment serve as a source of enlightenment and education. I think I can say without any spirit of vanity that there is no calling in life where its members are so unselfish as physicians and surgeons, not only in their readiness to answer the calls of the sick without the hope of compensation, but also, when by research or study, they have discovered some new and beneficial method or system of alleviating human suffering, or giving the benefit of such research and study to the world. So thoroughly has this latter idea been imbedded in the heart and mind of the physician and surgeon that it stands out prominently to-day as an unwritten law of the profession. That we, as doctors, do not always receive the benefits of such research and ideas is not from lack of desire on the part of the student, or discoverer, but rather from the lack of opportunity.

With a view of development and progress on these lines, I suggest that the committee on publication be given the power to publish the proceedings of the annual session and the engrossing therein such papers as we shall read at such sessions; that the members be invited to present to the committee during the interim between sessions such ideas as may, in their judgment, serve as a source of instruction and education. By this I mean the submission of papers on such cases that may come under their personal observation. These in turn to be published in pamphlet form, and distributed to the members free of charge.

In conclusion, let me add. It is said "a little nonsense now and then is relished even by the wisest of men."

Your officers believe that you should indulge in and have prepared for you a little nonsense. After laying aside the business of the meeting, you are expected to convene again in extraordinary session around the banquet board. The hour will be 7 P. M. to-morrow, and the place the St. Francis Hotel. Do not fail, one and all to be there.

The following applicants for membership in the association were reported on favorably by the executive board: Dr. J. C. Hearne, San Diego, Cal.; Dr. D. C. Lazier, Arlington, Ore.; Dr. W. V. Nichols, Oceanside, Cal.; Dr. F. M. Seibert, San Mateo, Cal.; Dr. J. J. Moyer, Mayfield, Cal.; Dr. T. M. Topp, Raymond, Cal.; Dr. L. P. Hall, Dixon, Cal.; Dr. H. P.

Palmer, Vacaville, Cal.; Dr. W. H. Porter, Calistoga, Cal.; Dr. J. W. Jesse, Santa Rosa, Cal.; Dr. E. B. Ketcherside, Yuma, Ariz.; Dr. J. A. Ketcherside, Yuma, Ariz.; Dr. Chas. Tenbner, Saticoy, Cal.; Dr. A. E. Ealy, Kingman, Ariz.; Dr. G. R. Carson, San Francisco, Cal.; Dr. W. Lee Moore, Verdi, Nev.; Dr. G. A. Broughton, Oxnard, Cal.; Dr. T. C. Edwards, Salinas, Cal.; Dr. D. D. Crowley, Oakland, Cal.; Dr. F. L. Adams, Oakland, Cal.; Dr. C. L. Abbott, Pt. Richmond, Cal.; Dr. J. R. Colburn, Los Angeles, Cal.; Dr. Guy Cochran, Los Angeles, Cal.; Dr. H. D. Lawhead, Woodland, Cal.; Dr. J. T. Colliver, San Bernardino, Cal.; Dr. Jno. Fife, Red Bluff, Cal.; Dr. A. M. Henderson, Sacramento, Cal.; Dr. F. Wilkes, Oakland, Cal.; Dr. E. N. Tiffany, Coalinga, Cal.; Dr. J. P. Gale, Arbutuckle, Cal.; Dr. J. V. Lazzalere, Escondido, Cal.; Dr. R. B. Williams, Sausalito, Cal.; Dr. J. J. Spottiswood, Mill Valley, Cal.; Dr. J. C. Booth, Lebanon, Ore.; Dr. Carl Kurtz, Los Angeles, Cal.; Dr. T. W. Huntington, San Francisco, Cal.; Dr. W. J. Circe, Carson City, Nev.; Dr. A. M. Smith, Merced, Cal.; Dr. C. H. Ingram, Clovis, Cal.; Dr. J. D. Reed, Covina, Cal.; Dr. O. P. Askam, Mountain View, Cal.; Dr. J. H. Tebbetts, Hollister, Cal.

Election of officers for the ensuing year:

President, Dr. N. H. Morrison, Chief Surgeon, Santa Fe R. R. Co., of Los Angeles, was nominated and unanimously elected.

First Vice-President, Dr. H. W. Fenner of Tucson, Arizona, was nominated and unanimously elected.

Second Vice-President, Dr. W. O. Spencer of Huntington, Oregon, was nominated and unanimously elected.

Secretary, Dr. James P. Dunn of Oakland was re-elected.

Treasurer, Dr. F. L. Adams of Oakland was nominated and unanimously elected.

Dr. E. M. Keys of Alameda was nominated to fill vacancy on the executive board and was unanimously elected.

The newly elected president, Dr. N. H. Morrison, appointed the following as members of the committee of arrangements: Dr. W. B. Coffey, San Francisco, chairman; Dr. D. D. Crowley, Oakland; Dr. J. H. O'Connor, San Francisco.

MEETING PLACE FOR 1905.

Grand Canyon, Arizona, was nominated by Dr. N. H. Morrison; Sacramento, Cal., was nominated by Dr. A. M. Henderson; San Francisco was nominated by Dr. S. E. Pinniger; Portland, Oregon, was nominated by Dr. H. Hildreth. San Francisco received a majority vote of the members present and was therefore named as the next meeting place.

This finished the business part of the meeting. The following scientific papers were read:

Address of the President, W. B. Coffey, San Francisco; reading of the minutes of the previous meeting; reports of officers, committees, miscellaneous business and announcements; "Appendicitis," J. H. O'Connor, San Francisco; "Ethyl Chloride as an Anesthetic," W. W. Fitzgerald, Stockton; "Railway Spine, the term as misleading, with especial care in the Diagnosis," J. W. Graham, Lompoc; "Tenotomy of the Tendo Achilles in Fractures of the Leg," A. W. Morton, San Francisco; "Report of a Severe Case of Railroad Injury, Involving Fracture of the Spine and Extensive Crushing of the Foot, Resulting in Recovery," T. C. McCleave, Berkeley; "Dermatitis Herpetiformis—Report of a Case," Robert A. Peers, Colfax; "Report of a Case of Fracture and Dislocation of the Pelvis," and "Observations on Treatment of Ununited Fractures," S. J. Gardner, San Francisco; Exhibition of patients and surgical clinic at the S. P. Co. Hospital, 14th and Mission streets, by members of the association; "Where to Amputate the Leg," J. P. Dunn, Oakland; "Rupture of the Urethra,"

Granville MacGowan, Los Angeles; "Traumatic Pneumonia," O. P. Askam, Mountain View; "Chronic Ethmoiditis in Its Bearing Upon the So-called Chronic Catarrh of the Nose and Throat," Redmond Payne, San Francisco; "Report of a Case of Nephrectomy for Multiple Calculi," and "Of a Case of Rupture of Bladder," Geo. A. White, Sacramento; "Some Observations on Railway Hygiene," B. Woodridge, Rocklin.

COUNTY SOCIETIES.

Alameda County.

Regular monthly meeting, October 11th, the president, Dr. J. Maher, in the chair. Dr. L. L. Riggire read a paper on the subject of "Nostrums." The doctor defined nostrums as being extra-pharmaceutical in their relation and more or less secret or proprietary in their origin. Although the sale of this class of drugs is steadily increasing, yet very few men have grown wealthy through handling them, because of the great expense of advertising. It is a lamentable fact that the medical men of to-day are prescribing proprietary remedies more than ever before. The smooth-tongued commercial traveler beguiles the unwary doctor to stultify himself and lend an aid in the swindling of the public.

Dr. L. P. Adams then read the histories of two cases of cystic kidneys. One case was diagnosed during life, the other only at autopsy. In summarizing, the doctor said that accurate diagnosis of bilateral cystic affections of the kidney was difficult, due especially to the fact that cases are seen with signs of cardiac insufficiency and dyspnea, and thus very little attention is directed to the kidneys, or that they are attacked with sudden coma or uremia; but slight aid can be rendered the patient when this condition is recognized. Blood and urine examinations are not constant confirmatory evidence of the lesion. Any surgical procedure is necessarily unsafe. That the most reliable signs and symptoms are the high arterial tension, cardiac hypertrophy, a constant low urea excretion and the presence of an indefinite mass in each renal region.

J. M. SHANNON,
A. S. KELLY,
Publication Committee.

Butte County.

The regular meeting of the Butte County Medical Society was held October 8th, in the offices of Dr. Musgrove, Chico.

After passing resolutions of sympathy for the late Dr. J. T. Harris, Dr. Musgrove read a very interesting paper entitled "Sanitation in Towns." Dr. Philo Hull opened the discussion, and all present offered suggestions as to the best methods to prevent the spread of disease in towns.

A committee was appointed to bring charges against and prosecute an illegal practitioner, Dr. Wah Hing (Chinese).

Whereas, In the death of Dr. J. T. Harris, the Butte County Medical Society has sustained the loss of an earnest and much respected member, his fellow practitioners a true friend and an able counselor, and the community a conscientious and devoted physician; therefore be it

Resolved, That we extend to his bereaved family in their hour of sorrow this last token of our respect and esteem; and be it further

Resolved, That a copy of these resolutions be sent to his family, and a copy also forwarded to the STATE JOURNAL, for publication.

Respectfully submitted,

D. H. MOULTON, M. D.,
L. C. PERDUE, M. D.,
W. B. JOHNSON, M. D.,
Committee.
D. H. MOULTON, Secretary.

Humboldt County.

At the time of the September meeting of the Humboldt County Medical Society Dr. George C. Pardee, Governor of California, was visiting Humboldt, and instead of holding the regular meeting, it was decided to give a reception and smoker to Dr. Pardee. The reception was held at the Chamber of Commerce rooms, and was attended by about thirty of the county physicians.

Dr. G. W. McKinnon, president of the society, introduced Dr. Pardee, who gave the members a very pleasant half hour's talk, dealing with some of his experiences while practicing medicine. After this, cigars were in order until about 9:30 o'clock, when Dr. Pardee had to leave to keep another engagement.

The regular October meeting was held in Eureka, Tuesday evening, October 11th. Considerable time was spent in discussing the best method of dealing with illegal practitioners, some of whom are in Humboldt. It was decided to leave the matter to the legislative committee of the society, who were given power to act as they thought best.

The paper of the evening was read by Dr. John J. Gaynor, of Eureka, on "Muco-Membranous Enterocolitis." Dr. L. P. Dorais, of Eureka, reported a case of chronic suppurative otitis media in which he had removed the ossicles; patient made a good recovery, and hearing in affected ear is fairly good since operation. Dr. C. O. Falk, of Eureka, reported a case of hysteria in a girl of fourteen, in which, on three or four different occasions, parents reported that child had not passed urine for four or five days. She was placed in a hospital, under the care of a nurse, and on each occasion, under careful watching, it was found that she passed a normal quantity of urine in twenty-four hours. The child succeeded in deceiving the parents completely when at home.

G. N. DRYSDALE, Secretary.

Orange County.

The Orange County Medical Society met in regular session Tuesday evening, Oct. 4th, with fourteen members present. Considerable time was consumed in reading and adopting a fee bill. Dr. J. I. Clark was elected to membership and the application of Dr. Jessie M. Burlew was filed. Dr. Burlew comes to occupy the offices of Dr. R. A. Cushman, who left the first of the month to enter upon his duties as assistant physician in the asylum at Ukiah, Cal. Dr. Royer read a very interesting paper on the old, old subject "Anesthetics in Obstetrics" which brought out the usual discussion this subject always does.

H. S. GORDON, Secretary.

Sacramento County.

The Sacramento Society for Medical Improvement met in regular session at the office of Dr. G. C. Simmons, August 23rd. The president, Dr. Henderson, occupied the chair, and the following members responded: Drs. W. A. Briggs, Cartwright, Foster, Henderson, Krull, Lindsay, McKee, Nichols, Parkinson, Ross, G. C. Simmons, G. L. Simmons, Strader, Twitchell, J. L. White, Wright and Wheeler. Dr. Henderson presented the name of Dr. Miner as an applicant for membership in the society. The application was allowed to take the usual course. Dr. Cartwright presented a case of a woman aged 67 who had recurrent appendicular trouble and who refused operation; she had also a troublesome recurrent neuralgia of the inferior maxillary division of the fifth nerve. The paper of the evening was read by Dr. G. C. Simmons on "The Present History of 'N' Rays." Discussion was opened by Dr. E. W. Twitchell. Dr. Twitchell thought that on account of the doubt as to the existence of "N" rays, a discussion of their properties was rather premature.

Several prominent investigators had been unable to demonstrate the presence of the rays. One prominent man spent fourteen days in a fruitless attempt to find them. But if rays of such a nature could be demonstrated, with their alleged qualities, they would be a boon to medicine. Dr. W. A. Briggs thought that the positive testimony as regards the existence of the rays was better to be accepted rather than negative testimony. Several other members joined in the discussion, after which the meeting adjourned.

J. W. JAMES, Secretary.

San Joaquin County.

The regular meeting of the San Joaquin County Medical Society was held at the office of Dr. R. B. Knight, September 27th. During the vacation months of July and August the society holds no meetings. Dr. Knight read a paper on "The Value of Antitoxin in Diphtheria." In this city and immediate neighborhood the doctor recently treated twelve cases; every case was of most severe type. Antitoxin was used in every case. All recovered with the exception of two patients in the country. These cases were well advanced and without treatment during their illness of a week. Both died of paralysis of the larynx and the doctor believes that the antitoxin had no effect on the result. The paper was liberally discussed. The next meeting will be held at the office of Dr. S. E. Latta.

BARTON J. POWELL, Secretary.

San Francisco County.

The meeting was called to order at 8:45 o'clock, the president, Dr. Rosenstirn, in the chair. Minutes of the previous meeting were read and approved by the Society.

Propositions for membership: Drs. Mary Turnbull, Millicent Cosgrave, James Hannah, Arthur Hirschfelder, Max Magnus, Wm. F. Blake.

Report of Committee on Admissions: Drs. A. H. Wright, Morton E. Hart, F. H. Zumwaldt, J. W. Gunn, Jr., James K. Hamilton, Anna E. Sweet, Russel W. Preston, C. N. Ellinwood, Louis Jacobs, J. A. Ellis, and B. Thomas were elected members of the Society.

Dr. Huntington presented an old case of bone transplantation. You will recognize this case as the one of bone transplantation which I presented before. It was a case of osteomyelitis. The other time he was walking on the side of his foot because the lower end had not been transferred to the lower end of the fibula. This has since been done.

Discussion on "A Series of Cases With Multiple Nerve Lesions," by R. L. Ash, and "Joint Lesions in Nervous Diseases," by H. C. Moffitt.

Dr. S. J. Hunkin—I think we should feel greatly indebted to Dr. Moffitt for showing us many things which we did not know. This woman whom he has presented I saw many years ago and made a diagnosis of sarcoma. There was no question in my mind about it and I was very easily mistaken. I see very few joint cases due to nervous lesions. Once in a while I run across a knee case which I think is tabetic. I had never seen a hip which I thought was tabetic. I had a case of hysteria in a young woman about 17 or 18. She had spinal tuberculosis and had been treated for it. She had developed a hip joint lesion, and after some months developed some peculiar nervous symptoms which I recognized as hysteria. After a little while I decided that she had a hysterical hip. It took me about one minute and a half to cure her and she has remained well ever since. I have had several hysterical hip joints but none quite so well marked as that one. The girl had a swelling around the hip joint over 2 inches.

Dr. C. G. Levison.—Dr. Moffitt laid stress upon the possibility of error in diagnosis of Charcot's

joint. I have seen a number of errors in that way. I have seen such legs amputated for osteoma. At the same time I feel that a surgeon who has a Charcot's joint will seldom make the mistake. During the last few years I have come in contact with a number of orthopedic conditions. The difficulty does not lie in recognizing the condition, but in recognizing a condition that is not a fully developed tabes. Under ordinary circumstances the surgeon examining a nervous case at once suspects an orthopedic condition, and looks for the knee jerk; if he gets a knee jerk he is satisfied that the patient is not suffering from tabes. As a matter of fact the neuropath to-day, if we have delayed knee jerk, if the Achilles reflex is absent or one or more sensory changes present, diagnose tabes. Mistakes are made in this way. These conditions will occur every once in a while in individuals with beginning tabes. The principal point is that we operate on patients with knee jerk which I believe at times are beginning tabetic conditions. Many of these cases do very well. We have the Charcot joint infection where we do not have surgical interference. My experience is that in these conditions we get fairly good surgical result.

Dr. D. A. Stapler.—Referring to neurotic edema, I saw a case in a young boy 15 years of age; after coming home from the baths he had a sharp pain in the penis. The penis swelled to three or four times its normal size. Next day the swelling was in the lower part of the right arm, and upper part of the forearm, which lasted several hours. The diagnosis was angioneurotic edema. Bromide of potassium may be used to advantage to prevent the recurrence of these attacks.

Dr. Emmet Rixford.—I am interested in the matter of diagnosis of these conditions. Recently I have had a patient in the City and County Hospital with Charcot's joint or neurotic condition of the joints of the foot with enormous hypertrophy. In that case the tabetic symptoms were in their incipency. The knee jerk was present but there was slight interference with sensation in the lower extremity. There was no tabetic gait; there was hypertrophy of the bone about the attachment of the synovial membrane to the joint. The man was almost unable to walk from the impingement of the bony process. There was really nothing to do for the case except amputation, which was done and the wound healed without trouble. The man has been well ever since as far as that particular condition was concerned. The patient whose radiograph was shown, with the tabetic elbow and shoulder, with great hypertrophy of bone, it was my pleasure to see with Dr. Reynolds and I was greatly interested in it. Of course this trouble is more frequent in the lower extremity than in the upper. With regard to surgical prognosis of such cases the clinical course is not comparable to ordinary infected elbow joints, which is a pretty serious matter when the infection is with the germ.

Dr. H. B. Reynolds.—The case justifies a little further description. The case was so typical that it really offered no difficulty in diagnosing after the condition was once thought of. It presented so many typical features that it may be well to go over them. The man came to the clinic complaining of an enormous swelling of the shoulder. It had come up, as Dr. Moffitt says, in the course of the night. He said in the history that the same thing had occurred in the elbow eighteen years before and the fact of its having occurred in the same sequence made me think the two were associated. Eighteen years before he had had an enormous swelling of the elbow coming on in the same way and in a short time the swelling had disappeared, and thereafter there was no interference with function and no pain. That it had gone on for the period of eighteen years, a slow growth, until this accident, is shown in the

radiograph. The shoulder was in the condition described and after thinking of various things, among which we considered sarcoma of the elbow joint, which we eliminated, we came to the conclusion that it was neurotic; syringo myelia which he had had for eighteen years. The symptoms consisted of atrophy of the entire ossii of the thumb and insensibility to pain and temperature in the whole left arm. Also some scoliosis which must have been one of the ordinary symptoms. The swelling of the shoulder was enormous; apparently in the shoulder as well as in the bursa around it. After staying in the hospital it gradually went down but did not entirely disappear. He left the hospital after some weeks and the joint will probably go on in the same way. The elbow presented hypertrophy and atrophy in the same joint. The shoulder was purely atrophic type. The upper end of the ulna hypertrophied. Radius not involved at all.

Dr. C. M. Cooper.—If one takes a number of locomotor cases it will be found that the large percentage occurs in the poorer classes. They all probably have had preliminary injuries. The important question is the treatment. I have seen several of these locomotor joints treated in different ways. Two or three of them were kept at perfect rest immediately following their occurrence and the effusion disappeared. I think the recognition of this kind of joint is important, in as much as with the proper kind of treatment we can get good results. I have seen two or three interesting cases at the hospital. There has been a man there supposed to have an osteo deformans of the spine. Impossible to bend and had to walk with sticks. There was a hyperactivity of the thyroid gland. He was treated with milk diet and sodium phosphate with the result that the rigidity disappeared. He is now able to walk about and can bend over. Same with Parkinson's disease. We have a man with definite symptoms of Parkinson's disease, tremor, voice symptoms, arthritis in both hip and shoulder joints; but already on paying attention to the diet much of the rigidity has passed off and he is able to walk with one stick. We should all recognize the fact that with the proper kind of treatment at the proper time we can do a lot for these cases.

Dr. H. C. Moffitt.—There is a great deal to say on this subject, a great deal of the work should be emphasized. A great deal of work can be done in the early recognition of these joints by the X-ray, showing that although trauma may have a determining influence, there are changes in the bones. This early recognition and treatment will help in the non-production of the severe type. It is the joint before it becomes the typical joint which we must recognize. With regard to surgery; surgery is justifiable, and is demanded in many of these cases. It is necessary to emphasize that these joints are benignant. Many men have worked with suppuration in the wrists or elbows. They may discharge through sinuses. It is important to bear in mind that these sinuses may discharge quite a distance from the joint. There are cases reported operated upon without anesthetic. The patients feel the movement but no pain, and watch the course of the operation.

Paper by Dr. C. B. Spaulding: "Report of a Case of Pylitis in Pregnancy: Remarks on the Vorhee's Bag."

In the discussion, Dr. Adelaide Brown said: "I have had some experience with these bags, and have failed once in a case of eclampsia. Left the bag in 18 hours, and at the end of that time there was no dilatation. The woman was a primipara, with tremendous edema of the whole body, and I think that the bag probably softened the cervix some, and decision was necessary. Except for that, these cases have been successful. We have used them a great many times."

Paper by C. F. Welty: "Radical Mastoid Operation, With Presentation of Two Cases."

Dr. Kaspar Pischel said, in discussion, that the ear surgeons are greatly indebted to Dr. Welty for drawing again the attention of the profession to the dangers of chronic otorrhea and to the importance of curing it by an operation. The operation must always be considered a serious one. Even the most experienced operators have sometimes injured the facial nerve.

Dr. Emmet Rixford.—This is a subject of the greatest importance. Of course a good deal of the matter can be best taken care of in a meeting of aurists and specialists; still the general bearings of the matter are of enormous importance. One point of importance is the danger of letting such chronic otitis media alone. Chronic otitis media is not necessarily tuberculosis, it is more apt to be a streptococcus infection, or myelitis. The trouble is how to treat these cases; if you do not operate, the patient is subjected to danger of cerebral infection. The bacteria will travel, and may set up a brain abscess. It is much better to do a radical operation. The cure in the radical operation will depend upon the thoroughness of the surgeon in removing not merely the dead bone, but in cleaning out the whole of the mastoid region, the cells which lie over the meatus as well as those behind. The operation is best done with the burr, by which you can have control of the field.

Dr. Thomas W. Huntington.—The doctrine that is preached here to-night is the correct doctrine for surgery in general. In any condition dependent upon a covered area of infection, the proper course is to uncover that area. I think that the early procedure is the proper one, and the one that should be carried into every department of bone surgery. I see no reason for the otologist standing upon different ground.

Dr. C. F. Welty.—It is surprising to me that more of these cases are not operated upon; that is the thing I cannot understand. The reason that I have read this paper here to-night is to get an expression from the general practitioner why these patients are not operated on. A certain number of these patients die every year right here. There are a certain number of specialists who do not advise operation. I think the only way to cure these patients is to operate on them. Treating them for a month or a few months does not get them well.

Unfinished business: Report of Dr. Allen, chairman of Executive Committee, read. Moved and seconded that the report be adopted and placed on file.

A substitute motion was made and seconded that a conference be held between the present Executive Committee and the Executive Committee nominated. Carried.

To the Members of the San Francisco County Medical Society, Gentlemen:—Your Nominating Committee herewith respectfully presents the following names to fill the various offices and committees for the ensuing term.

Signed, S. S. KAHN,
WM. FITCH CHENEY,
H. A. L. RYFKOGEL,

Committee.

President, Emmet Rixford; first vice-president, Philip King Brown; second vice-president, Lois Nelson; secretary, A. W. Hewlett; H. E. Alderson, nominated by W. F. Barbat, seconded by T. V. Huntington; assistant secretary, James Pressley; treasurer, F. R. Dray; librarian, W. I. Terry; trustees, H. Gibbons, Jr., W. W. Kerr, L. L. Dorr.

Committee on Admissions—W. Francis B. Wakefield, A. W. Morton, Morton Gibbons, Alfred Newman, Herbert W. Allen.

Committee on Ethics—George H. Evans, S. J. Hunkin, H. D'A. Power, E. G. Frisbie, D. A. Stapler.

Committee on Finance—E. L. Wemple, A. B. McKee, M. Krotoszyner.

Committee on Library—W. I. Terry, C. M. Cooper, C. Quinan.

Executive Committee—F. B. Carpenter, Geo. Blumer, Dudley Tait.

Committee on Public Health—H. A. L. Ryfkogel, E. S. Merritt, J. M. Williamson, W. A. Martin.

Delegates to the State Society—J. H. Barbat, Geo. Blumer, C. M. Cooper, W. F. Cheney, Emmet Rixford, J. Rosenstirn, H. A. L. Ryfkogel, H. M. Sherman, W. I. Terry, W. F. B. Wakefield.

Alternate delegates—M. Krotoszyner, F. G. Burrows, K. Pischel, J. M. Moss, H. C. Moffitt, R. L. Rigdon, L. Newmark, H. B. A. Kugeler, C. H. Rosenthal, Geo. Goodfellow, T. W. Huntington, Philip King Brown, Henry Harris, L. C. Deane, F. Ebright, H. D'A. Power, E. E. Kelly, D. A. Stapler, C. Quinan, H. Morrow.

The following delegates were elected last year for two years: J. A. Black, F. B. Carpenter, F. R. Dray, E. G. Frisbie, A. B. Grosse, S. J. Hunkin, C. G. Levi-son, C. S. G. Nagel, G. B. Somers, W. F. Southard.

Note of resignation from Dr. J. V. Middleton of Washington read. Moved that resignation be accepted.

Adjourned at 11:45.

Santa Clara County.

The meeting for the month of October was made the occasion for a general gathering of the physicians of the county, and was devoted to a discussion of the value of the state law, the method of its operation, and the general value of organization. (We will endeavor to publish a more extended report of this meeting in a subsequent issue.) Dr. Fowler read a paper giving his results with spinal anesthesia, which method he had employed 69 times without difficulty or complication. He considered it of the greatest value. The paper was discussed by Drs. Morton, Tait, Goodfellow and W. S. Thorne, of San Francisco. The meeting then adjourned to reconvene at the banquet table. An excellent supper was served, and Dr. Cothran presided as toast master. Drs. Simpson, Harris, Ulrich, Thorne, Tait, Jones, Goodfellow, Morton and Asay responded. Some of the remarks were both timely and valuable, and will be published later on in the JOURNAL.

Santa Cruz County.

The regular meeting of the Santa Cruz County Medical Society was held in Santa Cruz, October 10th, at 8 P. M. The program was as follows: "Medical Climatology and Balneology," by Dr. Sundberg; "A Demonstration of Typhoid Reactions in Blood and Urine," by Dr. Pope.

The following resolution was unanimously passed: *Whereas*, After much labor on the part of the reputable physicians of the state of California, there has been enacted a law regulating the practice of medicine which aims to protect the people from the impostor and quack; and

Whereas, It has a tendency to raise the standard of medical education and promote the best interests of the medical profession; and

Whereas, the supreme court of California has upheld said law; therefore be it

Resolved, That the Santa Cruz County Medical Society does hereby express its approval of the law as it now stands, and most respectfully asks the candidates for state assemblymen from this county, George C. Cleveland and James B. Holohan, to pledge themselves that, if elected, they will work and vote against any bill to repeal or amend the law referred to.

EXETER P. VAUX, M. D., President.
SAXTON T. POPE, Secretary.

Sonoma County.

[The report of the October meeting reached us too late for publication this month, but will appear in the next issue, together with the report of the No-

vember meeting, when action is to be taken on the following resolution. It should provoke considerable discussion, and is of vital importance to every member of this vigorous and growing county society.]

The Sonoma County Medical Society will meet in Dr. Mallory's office, Santa Rosa, Cal., November 10th, at 8 P. M.

Subject, "The Good of the Medical Profession of Sonoma County." Leaders, Dr. A. B. Herrick and Dr. Smith McMullin. The following resolution will be considered, and probably voted on:

"Be it Resolved, That the members of the Sonoma County Medical Society do not enter into any contract with any lodge, association, corporation, society or individual for any consideration, whether same be money or otherwise, other than that named in the fee bill or schedule of prices adopted by this society. Also, that from and after the date of the passage of this resolution any violation of this will submit the violator to expulsion from the society, and deprive him or her from any of its benefits."

We want every member of this society to attend this meeting. G. W. MALLORY, Secretary.

California Academy of Medicine.

The regular meeting for September was held on the evening of the 27th, Dr. Huntington, president, in the chair. Dr. C. M. Cooper presented some patients. The first was a man probably having syphilis, in whom marked benefit followed the administration of thyroid gland extract instead of potassium iodid. The second patient also probably had had syphilis for 10 or 12 years. He was markedly ataxic. The condition might have been locomotor ataxia or pseudo-tabes of syphilitic origin. There was a tumor in the abdomen that might have been a gumma. He was given potassium iodid and mercury, and in about 14 days was nearly well. The third patient (not presented) had had severe headache for eight years, growing worse. The eyes, nose, etc., had received special attention, without relief. There was found hyperesthesia of the scalp. A skiogram was taken, and it showed that the patient was suffering from an osteo-sclerotic condition of the skull. The question presented itself whether surgical interference would be of any avail. Dr. Cooper also exhibited a skiogram of a knee joint into which iodized sesame oil had been injected. It showed very markedly the iodine deposited or retained in the joint.

Dr. Moffitt thought there was decidedly too much diagnosis of "functional" disorders; it often meant a lack of proper diagnosis. He cited a case similar to Dr. Cooper's, of an osteo-sclerotic condition. In discussing the subject generally, he expressed the opinion that there was more cerebro-spinal lues in San Francisco than in any other city in America. Dr. George Blumer spoke of a case of sclerosis of the bones in which he had found, at autopsy, a greatly enlarged pituitary body. Dr. George Evans discussed the use of iodized sesame oil, and gave an outline of his own experience with it, he having found iodine in the urine several months after discontinuing its use. Dr. Tait asked if spinal puncture had been resorted to as a diagnostic aid. Dr. Cooper said there was nothing to indicate akromegaly, and he hardly suspected it, though the possibility certainly did exist.

Dr. L. W. Allen read a paper entitled "Papilloma of the Colon Undergoing Malignant Degeneration." The report went to show that a patient having an abdominal tumor might be greatly reduced physically, yet recover sufficiently to permit of operative relief. Drs. Tait and Ophuls called attention to the general laxity of expression in the use of "papilloma" as defining neoplasms.

Dr. Dudley Tait presented and discussed the merits of a new analgesic, stovain (not patented), which he said had been discovered by some French chemists, and is now being used in Paris to determine its value.

It seems to differ widely from cocain, in that it acts as a vaso-dilator rather than a vaso-constrictor. Its toxic relation to cocain is as three to one, cocain being three times more toxic.

Dr. A. W. Hewlett gave a brief report of some experimental work to determine the part played by bile in the digestion of fats. When added to pancreatic juice, digestion of fats was very greatly quickened; he thought possibly it might make a proferment into a ferment. Pure lecithin he found would also greatly increase the digestion of fats by pancreatic juice.

On motion of Dr. Philip Mills Jones, the academy unanimously extended a vote of thanks to Dr. Harry M. Sherman for having so generously allowed the academy to meet in his offices for several years past. It was also moved and carried that gentlemen proposed for membership be invited to read a paper before the academy before action upon their applications.

San Joaquin Valley.

The San Joaquin Valley Medical Society held its eighteenth semi-annual session in Fresno, October 11th, with about fifty members and visitors present. The following program was carried out: "The Menopause," Dr. E. S. O'Brien, Merced; discussion opened by Dr. J. L. McClelland, Los Banos. "Infant Feeding," Dr. O. W. Steinwand, Selma; discussion opened by Dr. M. L. Pettitt, Visalia. "Injuries of the Head," Dr. P. Manson, Fresno; discussion opened by Dr. J. D. Davidson, Fresno. "Puerperal Infection," Dr. A. M. Smith, Merced; discussion opened by Dr. W. T. Barr, Fresno.

Since our last meeting our membership has been depleted by the loss of our esteemed co-worker, Dr. R. O. Phillips, of Kingsburg.

Whereas, By the death of our brother, this society has lost a valued and zealous member, one ever ready to lend his best endeavors for the interest of this society and the profession at large. He was ever faithful to the duties intrusted to him; he was always ready to aid his professional brothers to the extent of his ability. The community in which he lived and worked also has lost a true and faithful friend, who freely gave his time and service for their relief, and was ever ready and willing to answer a call and administer to their wants; therefore be it

Resolved, That a copy of these resolutions be spread upon the minutes of this society, published in the STATE JOURNAL, and a copy be sent to his family.

J. D. DAVIDSON,
P. N. RUSSELL,
R. E. BERING,

Committee.

The next meeting will be held at Merced in March.

The following were elected officers for the ensuing six months: President, Dr. W. E. Lilley, Merced; vice-president, Dr. H. St. G. Hopkins, Fresno; second vice-president, Dr. O. W. Steinwand, Selma; third vice-president, Dr. Furtney, Dinuba, the secretary, Dr. J. R. Walker, the assistant secretary, Dr. A. B. Cowan, and the treasurer, Dr. T. M. Hayden, holding over.

Dr. A. W. Morton, of San Francisco, was a visitor.

After an interesting and profitable session, the Fresno County Society tendered a banquet to the San Joaquin Valley Society and the guests.

J. R. WALKER, Secretary.

Pan-American Medical Congress.

Dr. Frank Adams, president of the State Society, has been requested to appoint delegates to the Fourth Pan-American Medical Congress, to be held in Panama from the 4th to the 7th of January, 1905. Dr. Adams makes the wise suggestion that those who think they can attend this meeting notify him so that he may appoint delegates who will be in attendance. If you intend to attend the Pan-American, notify Dr. Adams and go as a delegate.

ALCOHOL IN SUPPOSEDLY DECENT PROPRIETARY NOSTRUMS.

The following is an abstract of a paper by Dr. Charles Harrington, published in the *Boston Medical and Surgical Journal*, entitled, "The Composition and Alcoholic Content of Certain Proprietary Foods for the Sick":

In presenting this brief communication I propose to discuss neither the question of the food value of alcohol nor the advisability of the use of that agent as a remedy in the treatment of disease. It is my intention merely to offer the results of my examination of a number of preparations which are extensively advertised, and, inferentially, widely used, as foods for the sick and for convalescents, and to leave the question of their true nutritive and therapeutic value a matter for independent judgment.

My attention was drawn to this class of preparations by the fact that an invalid who was faithfully following the directions accompanying one of them was observed to be more or less constantly in a state of intoxication, for which condition no cause could be assigned, until the suspicion was directed to the food, which proved, on analysis, to contain a fairly large percentage of alcohol; and this suggested the advisability of obtaining specimens of other preparations for investigation.

"Liquid Peptonoids.—Beef, milk and gluten, perfectly digested" is said to contain the albuminoid principles of beef, milk and wheat. "In cases of feeble digestion and wasting diseases," its effects are said to be "immediate and pronounced."

Dose: For an adult, one or two tablespoonfuls, three to six times daily; children in proportion.

The maximum amount recommended for an adult will yield less than an ounce of nutriment and the alcoholic equivalent of 3.50 oz. of whisky per day.

Analysis shows 23.03 per cent by volume of alcohol, 14.91 per cent of total solids, and 0.17 per cent of mineral matter.

Panopepton.—This is said to contain "the nutritive constituents of beef and wheat in a soluble and freely absorbable form." "A nourishing, restorative, stimulant, liquid food of incomparable value for the nutrition of the sick;" "the best food in acute diseases, fevers, etc., in convalescence;" "a restorative from fatigue;" "a special resource against insomnia."

Directions: "For adults, a dessert-spoonful to a teaspoonful several times a day and at bedtime; for infants, a few drops to a half teaspoonful according to circumstances, as directed by the physician."

It yields 17.99 per cent of solid matter (including 0.97 per cent of mineral matter) and 18.95 per cent by volume of alcohol.

Hemapeptone.—This is said to be a preparation of "albumose-peptone," "the end product of digestion of albumin and hematin, a true organic iron."

One is advised to take a teaspoonful, increasing to a tablespoonful as needed, after each meal.

Analysis: Alcohol by volume, 10.60 per cent; total solids, 19.54 per cent; mineral matter, 0.37 per cent.

Nutritive Liquid Peptone.—This is said to be "a valuable combination containing the nutritive constituents of beef and malt, predigested and ready for assimilation," and to possess "the properties of a gentle and refreshing stimulant."

No dose is given. The analysis shows: Alcohol by volume, 14.81 per cent; total solid nutriment, 15.20 per cent; mineral matter, 0.69 per cent.

Hemaboloids.—The nutriment in hemaboloids is said to be "partially digested and vitalized by treatment with nuclein, rich in iron and phosphorous-producing elements." It is said to enrich the blood, to increase weight and the number of red blood cells, and to enhance nerve action. The preparation is said to consist of vegetable nucleo-albumin, reinforced by beef marrow extract and beef peptones, and is to be used in all impoverished conditions of

the blood, such as anemia, general debility and in convalescence from all diseases.

The dose recommended is one-half to one teaspoonful three to four times daily in a little water, plain or aerated, or with cracked ice. "If necessary, increase to two tablespoonfuls."

The maximum recommended yields about a quarter of an ounce of nutriment, and the alcoholic equivalent of about one ounce and a half of whisky daily.

Analysis shows 6.36 per cent of total solids (about half as much as is contained in milk of fair quality) and 15.81 per cent by volume of alcohol. The mineral matter, which is largely iron, amounts to 0.62 per cent.

Tonic Beef.—Tonic Beef is said to contain "the nutritive constituents of beef, wheat and fresh eggs in a soluble, predigested and hence readily absorbable form." One is led to believe that the beef is carefully selected, and that the blending of the constituents of these three very important foods, and their flavoring and aging (whatever that may mean in connection with eggs), have been conducted on most scientific principles. Adults are advised to take from half to one tablespoonful every four hours and at bedtime; infants and children should be given from ten drops to a teaspoonful, according to age.

A teaspoonful every four hours will yield to the consumer in the course of the day about a half ounce of nutriment and the alcoholic equivalent of an ounce of whisky, for analysis shows 15.58 per cent by volume of alcohol and 18.16 per cent by weight of residue, including 1.04 per cent of mineral matter.

Mulford's Predigested Beef.—"A concentrated predigested food containing the entire nutritive value of beef in a completely digested form, ready for immediate absorption into the system."

It is claimed for it that "it is a complete natural food product, containing sufficient nutritive materials to maintain normal nutrition of the body," and that it is "indicated as an exclusive diet in typhoid fever, la grippe, tuberculosis, nervous exhaustion and all conditions of the system associated with enteebled digestion and malnutrition."

Dose: One to two tablespoonfuls in water every two or three hours, or as needed; children in proportion to age.

Analysis shows 19.72 per cent by volume of alcohol, 10.39 per cent by weight of total solids, which yield 0.20 per cent of mineral matter.

The maximum administration recommended, that is, two tablespoonfuls every two hours, disregarding the proviso "or as needed," would yield daily about 1.25 ounces of nutriment and the alcoholic equivalent of about six ounces of whisky, which might well be regarded as hardly adequate as an exclusive diet, in the diseases above mentioned or in any other condition of the system.

[Note.—One cannot but wonder whether the formulas of the above, filed with the *Journal of the I. M. A.*, disclose the quantity of whisky equivalent contained in them.—Ed.]

NO DISEASE INSIGNIFICANT.

No disease should be looked on as insignificant. Nothing seems less becoming than to hear medical men speaking lightly of disease in general, or of any disease in particular. It is no consolation to the mother whose child has died of one of the rare complications of chickenpox to find that many physicians think that too trivial to concern themselves with. Nor does it increase confidence in the profession to have hysteria and neurasthenia considered imaginary and ridiculous evidences of perversity, while the impatience, not to say lack of scientific interest sometimes shown toward other less well-defined neuroses, undoubtedly has some relation with the crowded ranks of followers of "isms" of all kinds.—Dr. Dock, Oration on Medicine, A. M. A.

THE UTERO-SACRAL LIGAMENTS AND THEIR RELATION TO THE GENERAL PELVIC CONDITION, OF WHICH RETROVERSION OF THE UTERUS IS THE CHIEF SYMPTOM.*

By W. FRANCIS B. WAKEFIELD, M. D., San Francisco.

SIMPLE, mechanical retroversion of the uterus, uncomplicated by any other pelvic disturbance, is rarely, if ever, seen by the gynecologist. The few cases that appear to be uncomplicated would probably be found with an associated pathologic lesion, if painstaking search were made therefor.

I am inclined, in general, to accept Baldy's proposition that we cease to regard a retroverted uterus as a pathologic entity, but rather that we look upon it as one of the results produced by morbid pelvic conditions. The enumeration of these different diseased conditions does not form a part of this paper, but, in general, may be said to be anything that disturbs the normal pelvic circulation, inhibits the pelvic nerve supply, or produces abnormal pressure, by any of which means the natural tonicity of the supporting structures of the uterus may be weakened, permitting them to become relaxed.

If one considers carefully the anatomic construction of the uterine ligaments, one cannot help but be impressed with the importance of the utero-sacral ligaments as the chief factor in maintaining the uterus in its normal position. We have seven pairs of ligaments connected with the uterus, three pairs being peritoneal reflections, and generally termed false ligaments, and four pairs of true ligaments composed of fibro-muscular structure. The false ligaments are: the lateral or broad ligaments, the anterior or vesico-uterine ligaments, and the posterior or recto-uterine ligaments. The true ligaments are: the round ligaments, the utero-sacral ligaments, the utero-pelvic ligaments, and the utero-ovarian ligaments.

The false ligaments, while generally supportive in character, cannot be considered truly supporting to the uterus. They fail to contain the proper histologic elements necessary to secure adequate supporting power. Their function is of a three-fold character: 1. They form an elastic, bridge-like structure for the conveyance and support of the vessels and nerves supplying the uterus. 2. They serve to maintain normal anatomic relations between the uterus and the other pelvic organs. 3. They act as buffers in reducing pelvic friction to the minimum.

Now let us look at the true ligaments and see what supporting power they have. The round ligaments act as guys, allowing the uterus a free play of motion, and yet becoming taut if the uterine fundus be pushed back farther than an inch or an inch and a quarter. The utero-ovarian ligaments give no support to the uterus, but act as a support to the ovaries, holding them up in their normal pelvic plane. The utero-pelvic ligaments, passing from the pelvic fascia over the upper part of the internal obturator muscle to the sides of the uterus and vagina, limit the side play of the cervix, and, when acting in conjunction with the utero-sacral ligaments, help to maintain the natural uterine equipoise. The utero-sacral ligaments, attached to the upper part of the cervix at one end and to the upper and lateral aspect of the sacrum at the other, hold the cervix backwards and upwards, thereby promoting anteversion of the uterine fundus. It is quite obvious that it would be difficult for the fundus to become retroverted while the upper cervix is sustained in the direction of a line drawn from the internal os to the sacro-lumbar articulation.

To recapitulate, then, we have, under normal conditions, the round ligaments acting as an anterior stay to the fundus, limiting its backward displacement;

*Read at the Thirty-fourth Annual Meeting of the State Society, Paso Robles, April 19-21, 1904.

the utero-sacral ligaments preventing the upper cervix from forward dislocation, a mechanical force which has the effect of sustaining the fundus in anteversion; the utero-pelvic ligaments acting as lateral stays which tend to equalize the work of each utero-sacral ligament and to generally immobilize the cervix.

Of all these mechanical factors which contribute to the support of the uterus the utero-sacral ligaments far exceed the others in relative importance. Let pathologic conditions prevail, however, on account of which these ligaments lose their natural tone and become relaxed, and what happens? The normal plane of the cervix becomes altered and the cervix moves forward and upward towards the anterior vaginal wall, and, as the cervix swings forward, the fundus naturally swings in the opposite direction until, when the cervix occupies an acutely anterior position, the fundus has either turned completely backward, or we find it held partly forward by the round ligaments while the uterus as a whole is retroposed, and the maintenance of this position for any great length of time will so weaken the anterior supportive structures that they will relax sufficiently to permit the fundus to retrovert. The above picture of the gradual stretching out of the utero-sacral ligaments and the consequent production of retroversion I have been able to demonstrate in case after case, and the more I practice pelvic surgery, and the more I study the female pelvis, in both health and disease, the more impressed do I become with the importance of these ligaments as natural factors in maintaining normal uterine equipoise.

The rational operative treatment for the relief of retroversion of the uterus where operative treatment is necessary, consists, in my opinion, in the reconstruction of the natural ligamentary supports which have become relaxed to such a degree as to be no longer supportive. The combined shortening of the utero-sacral and round ligaments intra-abdominally appeals to me as the ideal procedure. The technic is comparatively simple, and the results most satisfactory. At the same time we have opportunity to care for whatever associated pathologic lesions may be present.

The method of shortening the utero-sacral ligaments which I practice is one suggested by A. P. Stoner. The uterus is drawn upward and forward in order to bring the ligaments into prominence, and each ligament is transfixed with a fine silk suture two to two and a half inches from its uterine insertion. Midway between these first sutures and the uterus the ligaments are again pierced with a fine silk suture. After slightly relaxing the traction on the uterus, the first or higher suture is drawn downward and anchored to the uterus and to the uterine attachment of the ligament. The lower suture is drawn upward toward the sacro-iliac junction and attached to its fellow. Thus the ligament is folded upon itself in a three-ply fold. The operation is completed by whipping the folds together with fine chromicized catgut. To promote firmer adhesions between the folds of ligament the edges may be treated with an application of a 1-500 solution of bichloride of mercury; but care should be taken to wipe dry any excess of the solution. The ligaments must be shortened just enough to place the cervix in an easy elevated position. This operation of itself is probably sufficient to hold the uterus securely in place. To make assurance doubly sure, however, it is wise to also shorten the round ligaments by one of the standard methods.

The method of shortening the round ligaments which I prefer is that suggested by J. Clarence Webster, and emphasized by J. M. Baldy, which consists in passing a pair of forceps through each broad ligament from behind, directly opposite the uterine insertion of the round ligament and close to the uterus, pulling through a loop of round ligament on each side,

uniting these two loops with a fine silk suture, and attaching them to the lower posterior surface of the fundus with chromicized catgut.

In both of these maneuvers for shortening the ligaments one should be careful not to inflict any unnecessary trauma, or separate the overlying peritoneum from the ligaments.

DISCUSSION.

Dr. C. Krone, Oakland.—As a paper on the anatomical relations in the pelvis, I admire this paper exceedingly. It can hardly be under-emphasized that we should have these conditions continually in our heads. I also admire this paper very much from the standpoint of a gynecologist. One thing I would like to say in regard to the treatment: I would advocate, under certain circumstances, pelvic massage. I have seen and read about very interesting work in Munich and other places, and I feel quite sure that some cases, especially cases of retroversion and retroflexion, have been materially benefited by pelvic massage. I do not mean vaginal massage. There are great objections to pelvic massage because it is through the vaginal outlet, but great results can be obtained, and should be encouraged in selected cases. When constipation for years seems to be a symptom that can be ascribed to anything except retroversion of the uterus, I have found good results from massage for three or four weeks. When the ligaments are relaxed and do not hold the ovaries in the proper place, we can replace the ovaries. Even with cysts of the ovaries, which encourage us to immediate abdominal section, I think pelvic massage of these cysts is very good when you can exclude infection. The breaking of these cysts is done in a gentle way, and infection can probably not occur. I have seen dilated ovarian tubes aspirated, and with this dilation and disturbance I have also seen retroversion and retroflexion improved.

Dr. Wakefield.—I agree with Dr. Krone. This paper does not recommend operative procedure in all cases. General pelvic treatment should be given a faithful trial. I have practiced the manipulation suggested, and have found it most useful. I wish to impress upon your minds the fact that the utero-sacral ligaments are the important ones to be considered. I can tell, whenever I draw the cervix well down and feel the condition of these ligaments, whether the case will probably yield to palliative measures or whether it will be necessary to resort to operative procedures. They are very firm, fibrous bands, with very definite anatomic position. It is very easy to feel them, very easy to massage them and apply electricity to them, and very easy to shorten them by operative manipulation.

The Advertisements in the Journal of the American Medical Association.

The following editorial appeared in the August number of the California State Journal of Medicine, published by the Medical Society of the State of California, and edited by Dr. Philip Mills Jones. (Here follows the editorial from the August JOURNAL on the trustees of the A. M. A. and their conduct of the *A. M. A. Journal*.)

It is generally admitted by practically all members of the medical profession having average ethical sense that the advertising pages of the *Journal of the American Medical Association*, the representative and foremost medical journal of America, are a discredit to the organization, of which it is the official organ, and the arraignment by Dr. Jones is legitimate sequence to the course so long pursued by the trustees. May the journal of the Medical Society of the State of Pennsylvania never merit such an arraignment as this.—*Pennsylvania Medical Journal*.

SYNONYMS.

"Things which are equal to the same thing, are equal to each other."—*Axiom No. 1, p. 19 Davies' Legendre, Edition 1860.*

Few physicians know that many of the "new remedies" marketed under fanciful trade names are identical with remedies having dissimilar names, or are old preparations which have been given fancy names in order to create a false market for the thing in question. For the benefit of physicians and pharmacists the following table has been compiled and will be added to as the requisite information is obtained. The information is secured from chemists and from medical and pharmaceutical journals, and is correct in the main. Should any errors creep in they will be corrected as soon as detected. *Until sufficient evidence to the contrary is forthcoming, it must be assumed that there is no question of substitution involved when the pharmacist supplies a given article under any one of its synonymous names.*

Adeps lane hydrosus	{ Anasalpin Lanolin Lanum
Argentum Colloidale.....	{ Argentum Crede Collargol Colloidal silver
Beta-naphthol benzoate.....	{ Benzo-naphthol Benzoyl-beta-naphthol
Beta-naphthol Salicylate....	{ Betol Naphthalol Naphthosalol Salinaptol
Bromacetanilid.....	{ Antiseptin Asepsin
Bismuth-iodo-subgallate	{ Airol Airogen Airoform
Calcium beta-naphthol sul- phonate	{ Abrastol Asaprol
Creosote Tannate.....	{ Creosal Tannosal
Dimethyl - ethyl - carbinol chloral	{ Dormiol Amylene-chloral
Dithymol Diiodid	{ Aristol Annidalin Di Thymol Iodid Di Iodo Dithymol (And several other simi- lar names.)
† Epinephrin	{ Adnephryn Adrenalin Adrenamine Adrenol Adrin Caprenalin Hemisine Hemostatin Sanguetine Suprarenalin
Ethyl chlorid	{ Antidolorin Ethylol Kelene Mono-chlor-ethane
Hexamethylene-tetramine...	{ Aminoform Ammonio-formaldehyde Cystamine Cystogen Formin Saliformin Urotropin
"", anhydromethylen citrate..	{ Helmitol
Levulose.....	{ Diabetin Fructose Fruit Sugar

Ortho - ethoxy - ana - mono - benzoyl-amido-chinolin....	{ *Benzanalgene *Analgen *Quinalgen
Paraphenetin carbamid	{ Dulcin Sucrol
Phenyl-dimethyl-parazonol . (Germ. Pharm.)	{ Analgesin Anodynin Antipyrin Dimethyloxy-quinizin Methozan Phenazon (B. P.) Phenylon Pyrazin Pyrazolin Parodyn Salazonol Sedatin
Phenylacetamide.....	{ Acetanilid Antifebrin (And several hundreds of trade names for head ache powders, etc.)
Phenylmethyl-ketone.....	{ Acetophenone Hypnone
Plant pepsin.....	{ Papain Papoid Papayotin Caroid
Salicylic acid ester of qui- nine.....	{ Salochinin Saloquinin
Salicylate of Salochinin	{ Rheumatin
Sodium sulpho-cafeate.....	{ Nasrol Symphoral
Thyroid gland, dried lactose trituration	{ Iodothyrene Thyroidin
Trioxymethylen.....	{ Paraformaldehyde Paraform Triformol
Abrin - Jequiritin	
Acetyl-salicylic acid = Aspirin	
Aluminum aceto-tartrate = Also	
Australian oil Eucalyptus = Flucol	
Bismuth chrysophanat = Dermal	
Bismuth phosphate (soluble) = Bisol	
Bismuth pyrogallate = Helcosol	
Bismuth subgallate = Dermatol	
Bismuth beta-naphtholate = Orphol	
Calcium permanganate = Acerdol	
Calcium salicylate = Colchicin	
Catarin hydrochlorid = Stypticin	
Chloreton, 1% solution = Aneson	
Creosote carbonat = Creosotal	
Diethylen-diamin = Piperazin	
Dimethyl-xanthine = Theobromine	
Guaiaicol carbonate = Duotal	
Laricinic Acid = Agaricin	
Magnesium dioxid = Biogen	
Oxyquinaseptol = Diaphtherin	
Phenyl-ethyl urethan = Euphorin	
Saccharin = Garanotose	
Subgallate of bismuth = Dermatol	
Sodium chlorate = Oxychlorine	
Sodium beta-naphtholate = Microcidin	
Tang-Kui, Fl. extract = Eumenol	
Trichloracetic acid, 50% solution = Acetocaustic	

* Must be very cautiously used, if at all, for the physiologic action is not fully known, and this chemical is said to have very serious effect upon the heart and nervous system.

† See JOURNAL, June, 1903, page 178

California State Journal of Medicine.

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IMPORTANT NOTICE!

All Scientific Papers submitted for Publication must be Typewritten.
Notify the office promptly of any change of address, in order that mailing list and addresses in the Register may be corrected.

DECEMBER, 1904.

THE NEXT A. M. A. MEETING.

The next meeting of the A. M. A. will be held at Portland, Oregon, July 11-14, 1905. Applications for membership may be secured at the office of the Society, Room 1, Y. M. C. A. Building, San Francisco.

EDITORIAL NOTES.

With this issue the Publication Committee hands you the closing number of the second volume of your JOURNAL. It is by no means, as yet, fully the journal your committee would have it, but we feel that it is a pretty good journal and that you need not be ashamed of it. It is clean from cover to cover, so far as we know; it has not deviated one particle from the line marked for it; we have refused to print page after page of advertising that did not conform to the "Principles of Ethics of the American Medical Association." Were we to interpret these "principles" as loosely as have the Trustees of the A. M. A., very many dollars could have been added to the revenue of the Society; but your Committee would not. The work has not been easy and we have often fallen far short of our desired result, but we have given you of our very best, and no man can do more. Compare the present number with that of a year ago and we think you will agree with us that, no matter what our faults or our shortcomings, we have certainly made some advances and have brought your

JOURNAL a little nearer to what we all would have it. May each one of us have a very "Merry Christmas" and a better, a happier and a more prosperous New Year.

On page 375 will be found a letter and some comments relating to your JOURNAL. We would bespeak your very careful reading of this communication. For two years the JOURNAL has been trying its very hardest to tell the truth—some of it, at least—in regard to actual conditions about "secret proprietaries" (or nostrums), and things akin thereto. Not one word has yet been spoken questioning the truth of what we have said or combatting our position in regard to the ethics of the matter. If, after two years, not a single word of adverse criticism or argument has been spoken, we think that we may safely assume that our interpretation of the Principles of Ethics is correct and that the policy of your JOURNAL is therefore one that conforms with the dignity and the ethics of the medical profession. It is very evident from the letter in question that we have a few friends and many enemies. *But our enemies are merely the enemies of right principle and honesty* and therefore we should highly esteem, as complimentary in no small measure, the enmity of those who prefer dishonesty, fraud and quackery. Study the advertising pages of your JOURNAL carefully and remember your friends; remember those who are helping us in the fight by giving us their advertising patronage. One can stand a whole lot of enemies if he has but a few real friends.

The statistics furnished by a "Discussion of the Vital Statistics of the Twelfth Census," show a rather interesting condition of things in San Francisco. **DEATH RATE OF SAN FRANCISCO.** 1890 the population is given as 298,997 and the number of deaths 6,880; in 1900 the corresponding numbers are 342,782 and 6,657. In other words, the actual population increased 13,785 and the actual deaths decreased by 223; the per thousand death rate decreased from 23 in 1890 to 19.4 in 1900. What causes can be assigned for this very remarkable condition? It is likely that if the figures are in error the error, if corrected, would but add to the amount of decrease, for in all probability greater care is taken now than formerly, in the matter of recording births and deaths. The decrease is still more startling in the case of children under five. The figures for 1890 are 22,976 and 1,966; for 1900 they are 26,015 and 1,333; the per thousand rates for the two years are 85.6 and 51.2. What noticeable changes in the sanitation of San Francisco have occurred in the period from 1890 to 1900? None, that we can recall. "Health Hints for the Household" is a literary production of too recent a date to

have had any modifying influence upon the "families of contagious, infectious or communicable diseases." And further, a similar decrease (nearly 10%) for the whole United States is observed. Undoubtedly a certain amount of this decrease is due to a lessened number of deaths from tuberculosis, but not all of it can be thus accounted for. The reports show, however, that the energetic anti-tuberculosis work of past years has had good results and should be continued, if anything more energetically.

Some persons, for reasons best known to themselves, are saying extremely unpleasant things about the administration of the A. M.

UNKIND A. It has been reported to us that **SLANDER.** certain employees of the *Journal A.*

M. A. have circulated the statement that our Society is attacking the A. M. A on account of some factional matter. What the particular "factional" matter could be is not reported nor can we imagine. No more can we imagine the Trustees of the A. M. A.—our servants in the conduct of the work of the Association—nor any officer of the Association, permitting such an insult to California physicians. It is true that your Publication Committee and your Council, through the pages of your JOURNAL, have called the attention of the Trustees of the A. M. A. to certain of their methods in conducting the *Journal A. M. A.* which do not seem to conform to medical ethics as promulgated by the Association; but this is far different from an "attack" based upon and due to nothing more substantial than a "factional" feeling. We feel quite sure that no body of physicians in this country have a more deeply rooted affection for the American Medical Association. So proud are we of it and so much has it grown to mean to us that we cannot bear to see it doing even the least little thing that seems inconsistent with the very best and highest in medicine and medical ethics. This rumor is, apparently, nothing more than an attempt to stir up ill feeling and give some ground for the plea of "jealousy"; it is too preposterous; we will have to have something more than the name of a "Mr. Brown" attached to it before we can give it the slightest credence. We are loyal to the A. M. A., and all we ask of the Trustees is that they put the accumulation of a large fund second, and a more active and energetic application of the "Principles of Medical Ethics" first. And this we believe they are doing, now that the matter has been called to their attention, for with each succeeding issue of the *Journal*, we notice that there are more additions to the list of proprietaries with the advertisement of which the formula is given. Gentlemen, we thank you and we congratulate you. But do the good work more fully; make your formulas *quantitative* and not merely qualitative; the qualitative formula is absolutely valueless.

The Cancer Commission of Harvard, in its report made early in November, is in almost

THE CANCER COMMISSION.

every particular destructive rather than constructive. Apparently the parasitic theory of causation must eventually be absolutely abandoned; and equally apparently our hope of ever having definite information as to cause must wait until vastly more knowledge of the processes of metabolism and tissue nutrition has been gained. The work is necessarily slow and tedious. One thing the report seems to confirm, and that is the uselessness of wasting time in the treatment of any form of cancer by the X-rays. Even when, in some cases, improvement seems to follow their use, the result is probably due to a process not unlike cauterization. Exposure to radio-activity after operation is desirable, but removal of the malignant neoplasm should be secured by operation. In the main, the report corresponds closely with the findings of the commission of the British association.

Elsewhere in this number of the JOURNAL will be found a list of the gentlemen who have been

WATCH THE LEGISLATURE.

chosen to make and unmake and amend the laws of the State of California for the session beginning January 1, 1905. Study this list carefully. Bring up the matter in your county society, and discuss the personnel of the men from your section of the State. We have the best of reasons to believe that the quacks and charlatans and illegal practitioners—not to speak of the eddyites—will make an attempt to have the present medical law emasculated—amended so skillfully that it will be practically valueless. The present law has been found to work well; it has been sustained in every particular by the Supreme Court of California; practically the entire medical profession of the State approves of it, for the number of physicians (licensed) who do not, is inconspicuously small. The Council will arrange to keep a careful watch on all that goes on at Sacramento, but each county society will have to look after the representatives from its territory; have them clearly understand that you do not want the law tampered with and that if they have further political aspirations they had better keep hands off. Don't be too confident and don't go to sleep; watch the legislature till it gets through legislating, and then you may rest.

The JOURNAL is advised that some of its editorial statements anent medicines have been misunderstood. We are sorry.

CHEMICALS vs. PROPRIETARIES.

There certainly can be not the slightest ethical objection to the use of definitely known chemical substances. The only possible objection to them can come solely from their multiplicity;

their number no mortal mind can compass! There is a very decided difference between them and secret proprietaries—those mixtures of unknown composition and mysterious virtues. No physician should, under any circumstances, make use of a mixture the composition of which is unknown to him. He does wrong to himself, to his common sense, to his standing in the profession, to his obligations to the sick and to the public, when he does use this stuff. Why? Because he does not know what his patient is taking, and hence may be giving him something highly injurious! With definite chemicals, however, the matter is different. After a new chemical has been studied and its physiological properties have been recognized (and this is generally done before it is put upon the market) there can be no objection to its use, if its action is what you consider desirable for your patient. The whole thing is very simple when you come down to the bottom of it. What are you giving your patient, and how much at a dose? If you know, and it is what you believe your patient needs, use it; if you do not (and nine times out of ten you do not if it is a proprietary mixture), don't touch it; don't soil your hands or your reputation with it. If it is a legitimate medicine, fit for use, the formula should be printed with the advertising statements concerning it; if the formula is not given, leave it alone; it is dangerous.

The manufacturer of a remedy—or medicine—("Any agent or substance used in the treatment of disease") who advertises

TWO AGGRIEVED MANUFACTURERS.

his remedy to the medical profession in the pages of medical journals, does so, presumably, with the not unreasonable hope that doctors will see the advertisements and prescribe his remedy in the treatment of their patients. That seems to be clear and within the range of probable truth. It necessarily follows, if the remedy is to be intelligently used, that the exact nature or composition must be stated in the advertisement; otherwise the conscientious physician cannot tell what it is nor use it, without loss of dignity to himself and doing injury to a broad fundamental principle of ethics. The Dios Chemical Co. and the Organic Chemical Co. consider themselves injured by the JOURNAL for the reason that their wares were included in a list of some remedies of unknown composition published in the August JOURNAL. The trouble is with the manufacturers and not with us. Had the advertisements of these things stated exactly the composition or nature of the remedies, they would not have been placed in bad company. The Dios Chemical Company manufactures remedies that are mixtures and it is with pleasure we note that their advertisement in the *Journal A. M. A.* now includes the formula. It does nobody much good to put the formula on the label of the bottle

and not in the advertisement; the doctor who wishes to prescribe a remedy cannot be expected to go and look at the bottle before he writes his prescription. In the case of the Organic Chemical Co., the remedy advertised appears to be a chemical; but that fact was not stated in the advertisement. The advertisement of definite chemical substances for which letters patent have been issued, should include the chemical name or the formula or the number of the patent, simply for purposes of identification.

"Out of the mouths of babes and sucklings hast thou ordained wisdom." With a complacency truly beautiful to behold

JAPANESE ARMY MEDICAL CORPS.

we look upon Japan as an infant among nations, and are tremendously surprised that she can do things like other civilized peoples. So it has come like a shock to the medical men of this country, to learn that the medical corps of the Japanese army is the most efficient body of its kind in the world; even when handicapped with some really truly American Red Cross nurses, headed by Dr. Anita McGee and enfiladed with tins of meat extract, ordered by telegraph. Japan, through her army medical corps, has shown the nations of the world their ignorance and crude folly in allowing 80% of deaths in an army on a war footing, to occur from preventable diseases. What a jar to our Occidental complacency! It has been conservatively estimated that the advantage of Russia in the total number of possible combatants is quite fully counterbalanced by the ability of the medical department of Japan to prevent needless loss of life by disease. Think of our impudence in sending tinned-beef-red-cross aid to a people who have, in spite of it, put the balance of the world to open shame!

The sixteenth edition of the Register and Directory, just issued by the State Society, contains very few errors; or rather, **CORRECTIONS IN REGISTER.** contained very few at the time the book went to press. Changes in address are coming in daily

and probably there are a number of members who would like to be advised of such changes. It has therefore been decided to publish in the JOURNAL, from month to month, a list of the official changes of address which come to our attention. This list can be made very much more useful if members will bear in mind the necessity of advising this office of all changes promptly. Secretaries of county societies can also very materially aid in the work by checking up the lists of physicians in their respective counties and notifying the publication office of any errors, omissions or corrections noted in the county lists. No mortal man can make a satisfactory directory without the co-operation of others; the

Society cannot afford to send agents about the State to correct the county lists; this work is part of the duties of county society secretaries. The publication office is doing all possible to make the register accurate and to keep it so, and the more you aid in the work, the more nearly will the result approximate to accuracy.

Important action was taken by the Board of Medical Examiners at the meeting on October 26th. After consultation with the Attorney-General of California, and Attorneys-General of other States, it appeared that legally there should be no return of the fee paid by a candidate, in case of his rejection. The board ruled that it would retain half the fee and return the other half; probably further action will be taken at some subsequent time resulting in the retention of the whole fee. By unanimous vote of the board it was decided to abolish the "condition" system. Instead, a motion was passed to the effect that a minimum of 50% must be attained in each and every one of the nine subjects, and a general average of 75% in all. On motion, it was unanimously decided to send an official notice to every illegal practitioner known to the board, warning that unless he ceased from violation of the law the board would lend its influence to and co-operate with the county medical societies in enforcing the law. This is the first time that the Board of Medical Examiners, as such, has officially taken cognizance of the existence of illegal practitioners, or taken any action in the matter.

The suggestion made by Dr. Goodfellow, in the last JOURNAL, that notices of clinics, operations, etc., be sent to this office and posted for information of physicians from out of the city, has already been acted upon by some men. We are now receiving a few notices and hope, with the passage of time, to receive still more. Members of the Society visiting San Francisco should bear this in mind and come to the office to find out what clinics or operations are available. Beginning with January the JOURNAL will publish a list of all such notices sent in during the previous month, in order to give some sort of idea as to the nature of the material offered. Probably it will take a little time for the men who have control of the clinical material to learn to remember to send us notices, but the labor is not much and the result may be very great. We feel sure that members of the Society will highly appreciate the courtesy of the operators and clinicians in thus extending to them the opportunity of benefiting by this clinical material; and on the other hand, the operators and clinicians will be brought more closely in touch with their fellow members about the State.

Please, gentlemen of San Francisco, send in your notices; and members outside of San Francisco, come to the office when you are in the city and learn what material is offered.

EXAMINATIONS, OCTOBER 25th and 26th.

The following is the result of the recent examination. It will be seen that the average is just about the same as previous examinations. The questions in Chemistry have been criticized but we are advised by the board that no candidate failed for failure to pass in this subject.

PASSED.

University of California, 1904—84 $\frac{1}{2}$ %, 83 $\frac{1}{2}$ %, 80 $\frac{1}{2}$ %, 77 $\frac{1}{2}$ %, 76%, 76%, 76%, 75%.
Cooper Med. Coll. 1904—84 $\frac{1}{2}$ %, 83%.
Hahnemann Med. Coll., S. F., 1904—79 $\frac{1}{2}$ %, 77 $\frac{1}{2}$ %, 77 $\frac{1}{2}$ %, 75.
Coll. of P. and S., N. Y., 1884—80.
Northwestern Med. University, 1899—77.
Johns Hopkins University, 1904—76 $\frac{1}{2}$ %, 75.
67.8% Passed.

FAILED.

University of California, 1904—70%.
College of P. and S. San Francisco, 1904—61, 60%.
College of P. and S. of Baltimore, 1904—66 $\frac{3}{4}$.
Univ. of Southern Calif., 1904—58 $\frac{3}{4}$.
Univ. of Iowa, 1904—64%.
Harvard Med. School, 1896—64%.
Med. Dept. University of Mich., 1881—66 $\frac{1}{4}$.
Albany Med. Coll., N. Y., 1892—58 $\frac{3}{4}$.
Calif. Med. Coll., 1904—(Failed third examination.)
32.2% Failed.

Univ. of Calif.....	8	passed;	1	failed.
Cooper Med Coll.....	2	"	0	"
Coll. P. and S., S. F.....	0	"	2	"
Hahneman Med. Coll.....	4	"	0	"
Univ. Sou. Calif.....	0	"	1	"
Calif. Med. Coll.....	0	"	1	" (third time)

NEXT STATE EXAMINATION.

There will be an examination in San Francisco, December 6th, 1904.

Publication Committee Meeting.

The Publication Committee met on November 11th, and unanimously passed the following Resolution:

Resolved—1st, that in the opinion of this Committee, it is not in accordance with medical ethics for Medical Journals to advertise secret remedies.

2nd—That the definition of a remedy or medicine shall be "Any agent or substance used in the treatment of disease." (Gould's Dictionary).

3rd—The quantities of the active ingredients of any remedy advertised in the CALIFORNIA STATE JOURNAL OF MEDICINE must be published with all advertising statements relative to such remedy.

To the Trustees of the American Medical Association: "While many publishers are entirely without conscience and will continue to accept contracts for medical advertising which is objectionable and usually fraudulent in intent, yet it is a hopeful sign when the editors of the better class of periodicals recognize the iniquity they are parties to in accepting medical advertising, and forthwith decide to decline all such business."—*Fort Wayne Medical Journal-Magazine*. Here is another journal that seems to regard the advertising medium as responsible for the character of the advertising which it prints. Will our trustees wake up some day, or are they like the little ostrich who knew it all?

THE IDEAL OF ACCURACY IN MEDICAL WORK; ITS IMPORTANCE AND ITS LIMITATIONS.*

By RICHARD C. CABOT, M. D., Boston.

I.

WHEN the history of clinical medicine comes to be written, I think that the most striking characteristics of its progress on this half century will be regarded as:

1. The use of exact methods in diagnosis.
2. The use of instruments of precision.
3. The keeping of full and accurate records.

We cannot be too thankful that it is so. I see three ways in which these tendencies have begun to accomplish the cleaning up of the dark places of our professional life.

(a) In the first place they have done a great deal to sweep out all such refuse as the concepts of the various *diatheses*—"the lithemic diathesis," "the gouty diathesis," "the rheumatic diathesis" and similar traditions which cannot bear the tests of criticism and disappear when the searchlight of exact methods is applied to them. We have to thank these modern tendencies for the gradual disappearance from our vocabulary of sentences about "*bilious*" conditions which now survive chiefly in the vocabulary of our patients, who always seem to know so much more about them than we do. So it is with the "*congestions*," of the brain, of the lungs, of the liver, of which we used to say so much and know so little. So it is with many of the "*anemias*," diagnosed purely on that most deceptive piece of evidence, facial color, and with many of the multitudinous affections classed as "*rheumatism*." These remnants of "traditional medicine" it has been the inestimable service of modern scientific methods to sweep out of our path; and I think we may say that the replacement of traditional medicine by scientific medicine is something we cannot seek too early or be too grateful for, as fast and as far as we succeed therein.

(b) A second inestimable service rendered by the tendencies which I am now describing has been to build up in us habits of mind that are instinctively antagonistic to habits of lying. It is not at first sight obvious how the use of instruments of precision and the influence on precise methods in their use favor the establishment of truthfulness as a corner-stone of our dealings with each other and with our patients. But although this is not obvious, I am convinced that it is true. Anyone who records his cases and makes his observations in an inaccurate or slovenly way finds his mind filled with a kind of haze. To clear away this haze when he comes to state his results, it is almost inevitable that he should fall into the habits of drawing upon sources other than reality for his materials and for his terms. If, on the other hand, a man has made his analyses, his measurements and his clinical records accurately and thoroughly, he learns to *lean upon fact*, and to have confidence that whatever is true will turn out to work well. Thus he gets out of the habit of improvising, modifying or embellishing his statements to suit traditional or preconceived ideas. An enthusiastic advocate of manual training in the public schools once said in my hearing that a boy who had had a thorough course in Sloyd work would never tell a lie. In this obviously exaggerated statement there is, I think, this much of truth: Such a boy will find it much *harder* in the future to lie. The habit of taking our bearings straight from reality, a habit which woodwork or any other form of manual training produces, makes us almost helplessly dependent on data observed for every step of our thinking and of our plans. It is as if an actor should get into the habit of being prompted continually from behind the scenes so that he never spoke his lines by rote or found the need of improvising them. The habit of improvising an

embellishment cannot be acquired without practice, and so the incessant use of scientific methods soon gets us fatally out of practice in the use of lies.

Quite without conscious intention or pious effort, therefore, I believe that our modern methods of medical work are steadily driving out those habits of mind that make possible the use of prevarication and lies of any shade.

(c) By sharpening the lines between what we know and what we do not know, between what we have achieved and what we have still to achieve, scientific methods of work make true progress possible. For it is only by knowing just where we are and just where our lacks are situated that we become capable of progress.

II.

I think I must have made it clear that the tendencies which I have been describing are the very breath of life. We feel stifled and mouldy in the atmosphere of traditional medicine. And we see clearly that the current of scientific medicine has made us all what we are. But we do not always see so clearly that we must *direct* that current; ceaseless vigilance on the part of the old-fashioned faculty of common sense is nowhere more in need than in the guidance and regulation of the gigantic and beneficent tendencies now at work in our profession. We are told that it is not so much the gun as the man behind the gun that makes the success of the American and Japanese navies. So in the use of instruments of precision; the brain behind the instrument, the man behind the microscope, is the achieving force. Now, obvious as this seems when stated in cold print, it is not by any means so obvious as to be always acted upon. There is a tendency which one can hardly recognize until he has felt its poignant force in his own person to get carried away by one's own methods until the methods come to replace the active brain that ought to be using them. I see in others and feel in myself the danger that we may substitute the routine use of some excellent method—say of history-taking or of physical examination—for the free play of the actively inquiring mind, the mind capable of being surprised and of seeing what it does not expect to see. Conventionality, literalism and formalism are dangers just as formidable in medicine as they are in religion. Perhaps more formidable because we are not so much on the lookout for them, and because they creep in in so insidious and stealthy a way. From a slightly different point of view I may describe the tendency just referred to as one of the Protean shapes assumed by our aboriginal laziness. Paradoxical though it seems, I have no doubt that the scientific method is at times nothing more than a disguise assumed by our ineradicable laziness. I know no form of labor which the average man shuns more instinctively and more constantly than the labor of thinking, or the labor of fresh observation. But the doctor is after all human and capable of temptation all the more readily when the temptor assumes the subtle and baffling guise of the "scientific method"! I know a doctor who never forgets his stethoscope, his blood counter or his percussion hammer when he starts on his rounds in the morning, yet not infrequently he is so absent-minded as to leave at home one all-important instrument—his brain.

I suppose it is impossible for us to overestimate the debt which we owe to Germany in the field of scientific medicine. For years we have been fed with the results of German industry and ingenuity until it has become habitual for us to stretch out our necks in that direction like fledglings in the nest. But we have also acquired the habit (and here is my point) of *bolting our food*, of gulping down in true American fashion the pabulum furnished us by our Teutonic brethren, forgetting that assimilation is a necessary prerequisite for nutrition. Now this habit of bolting down, unmodified, the nutritious gifts of

* Read before the regular bi-monthly meeting of the Alumni Association of the Med. Dept. of the Univ. of Calif., Aug. 29, 1904.

our Teutonic brethren, has given us several forms of scientific indigestion. One of these dyspepsias results in the idea that absolute accuracy should be sought for so far as possible at all times and in all places. Now absolute accuracy is an ideal, not simply unobtainable but self-contradictory, as I think I can show you by a few examples. It is of course commonplace that accuracy is always relative. Relative in the first place to the limitations of the instruments which we employ. "Accurate within the limits of error of the instrument employed" is the most that we can ever say of our observations, and that these instruments have limits of error, and very wide ones, is not always sufficiently realized. Neither is it sufficiently realized that our accuracy is relative not only to limitations of the instrument employed, but also and chiefly to our *purpose*. What is accurate enough for one purpose is not accurate for a second and is too accurate for a third. I think it is safe to say that no physician in active practice can make physical examinations which are accurate even up to his own standard of possible accuracy. Such an examination would consume half a day at least, and even then many points would be left uninvestigated because they seemed relatively unimportant. I think it is well for us to realize that this is always the case, and that in consequence it is always our duty to direct our accuracy like a searchlight, where it can do most good. We must be inaccurate somewhere. The wise physician is he who knows well how to decide where and when to be accurate, where and when to get along without accuracy.

Ludicrous examples confront us now and then, of misplaced accuracy, of misdirected exactness. A physician of my acquaintance was consulted not long ago by a lady for the relief of dyspepsia. The doctor made a careful estimation of the size, position, mobility and secretive activity of her stomach, analyzed gastric juices by careful quantitative methods, examined the urine, and rendered a report containing quantitative measurements of the different solids as well as the ordinary chemical and microscopical tests, counted the red and white corpuscles, measured the hemoglobin, made a differential count of the leukocytes, and examined minutely the condition of the thoracic and abdominal organs. From the indications obtained by these examinations he prescribed for the patient with great care, but—as it turned out, without success, for the patient's nausea and other gastric symptoms continued unrelieved. Some months later it was learned that the cause of her trouble was pregnancy.

Now what I want to bring out by this example is this: The fact of the pregnancy could not have been discovered at the time the doctor saw his patient by any method of physical examination, but it might have been discovered, or at any rate strongly suspected, had he directed as much energy and accuracy into the taking of his history as he put upon the physical examination. He used plenty of accuracy, but he used it in the wrong place. He was too accurate, that is uselessly accurate in some respects and correspondingly inaccurate in other and more important respects. Now the relative importance of the different aspects of a case is something not to be learned by becoming expert in any or all of the known methods of investigating disease. It is and must remain the work of common sense. Let me enumerate briefly a few other examples of what I regard as misdirected accuracy, or perhaps I had better say, disproportionate accuracy.

1. The estimation of the urinary solids by quantitative methods is usually a pure waste of time, not because it does not tell us anything, but what it tells us is altogether unimportant for the diagnosis, prognosis and treatment of disease. The information that it gives us is information that we cannot make any use of, and indeed the inferences drawn from it may be misleading or actually harmful. Take for

example the quantitative estimation of urea, a solid which I suppose we measure more frequently than any other of the urinary constituents, under the quite mistaken impression that we are securing thereby knowledge of the secretory power of the kidney. We all know, if we stop and think of it, that the output of urea represents not merely the functional power of the kidney but the resultant of a much more complicated group of forces. The output of urea depends not merely on the power of the kidney, but upon the amount and kind of nutrition furnished the patient, and upon the success of his organs in dealing effectively with what is given him. To interpret the significance of a urea estimation we need a knowledge of the patient's total metabolism. In most cases in which I have known measurements of urea to be recorded there has been no accurate knowledge of the food taken into the body, and no possibility of allowing for the modifications produced by such symptoms as vomiting, diarrhea, sleeplessness, confinement in bed and psychical disturbances. Yet in measuring urea we are measuring a quantity dependent upon each and all of these influences as well as upon the functional power of the kidney. It would hardly be more absurd if we attempted to measure the efficiency of a street transit system by the number of patrons deposited every night at the theatres. It is true that this figure would depend in part upon the efficiency of the transportation system, but to neglect altogether such factors as the degree of attraction of the plays running at any given time at the different theaters, the clemency or inclemency of the weather, and the state of the patrons' purses, would be no more absurd than the attempt to measure the functional power of the kidney by the estimation of the urea alone.

It is quite true that if we had a definite and accurate knowledge of the patient's metabolism we could learn a good deal from the output of urea, but in the vast majority of cases it is not possible for us to get any such knowledge of his metabolism, and without it our urea estimations appear to me a pure waste of time. It may be said that we may gain from them, at any rate, a rough estimate of the functional power of the kidney after making allowances for all the sources of error above alluded to. In a measure this is true, but it is also true that we can gain the same information without taking the time to estimate the urea at all, simply by measuring the 24-hour amount of urine and the specific gravity. From these two simple facts we can glean all the information that is afforded us by urea estimations except in the very rare cases where it is possible for us to spend the time necessary to estimate his total metabolism.

A similar mistake in the distribution of our efforts at accuracy occurs in many of the quantitative estimations of hydrochloric acid in gastric contents which give us the appearance of great scientific force without the fact. Again and again I have known physicians to estimate most carefully the percentages of free or combined hydrochloric acid and of acid salts, while they had neglected to get even an approximate idea of the two most important facts about the stomach in disease, namely, its size and its motor power. The measurements of the gross total of residue in the fasting stomach and of the size of the organ after distention with air or water, gives us facts of far greater value than the more accurate quantitative estimations of acid which occupy the foreground in most accounts of the stomach functions. With Congo red paper an estimate accurate enough for most clinical purposes can be obtained in a few minutes, and the time thus saved can be put into more accurate work in other directions.

In blood examinations far too much time is spent in making counts of red corpuscles. Not in more than one case in twenty-five in my own practice do I find it necessary to make such estimation. If the hemoglobin is normal, and if there are no other

obvious evidences of anemia in the general examination of the patient and in the examination of the stained film specimen of blood, there is no need for consuming the time and energy necessary for a red count. The essential parts of blood examination in the vast majority of cases are the total count of white corpuscles and the examination of the stained film. This is the direction in which we want to put our acnuracy.

I think it is unnecessary further to multiply examples. Anyone can think of similar cases as soon as his attention is turned to the matter.

III.

I wish now to turn to quite a different aspect of my subject, yet one which is a branch of the same difficulty, I mean our failure properly to direct the current of the scientific tendencies of our time. It is a common, but I believe a very fallacious belief among physicians, that "laboratory work" is a term as wide as "accurate work," and that clinical work must needs be comparatively inaccurate. Let us glance for a moment at the derivative meaning of these words. The laboratory is simply a place for "work." The word means nothing more. Clinical means simply "at the bedside." Now, my contention is that for most of us the best place for work is at the bedside. That is the place where the most essential information can be acquired both for the benefit of science and for the benefit of the patient. There is no more pernicious fallacy extant than that which supposes that there is a necessary division between the "laboratory man" and the "clinical man," or between "laboratory work" and "clinical work." This is a distinction which Dr. Deaver of Philadelphia has done much to harden. He is never tired of insisting that the point of view of the clinician in diagnosis is superior to that of the laboratory worker. But why in heaven's name should we have to choose either one? Now why should not each one of us make himself master of all the facts necessary for the diagnosis of his case, both the facts obtained by what we ordinarily call the clinical examination of the patient and those obtained with the help of the microscope and of chemical reagents. If one had to choose (for example, in the diagnosis of appendicitis), between knowing only the facts obtained by microscopical and chemical analysis, and knowing only the facts obtainable at the bedside without the help of these agencies, why, I suppose any of us would choose the bedside as the better standpoint for observation. But my point is that we never ought to be forced into making any such choice. Not either one without the other, but both. That is what we want. No one is so foolish as to depend wholly upon a single method of examination in diagnosis whether that method be either a measuring of temperature, which we ordinarily call a "clinical fact," or the counting of leukocytes, which we ordinarily call a "laboratory fact." All such facts are of value only when considered in connection with all other available evidence. They are like single letters of the alphabet, which in their isolation are almost meaningless, yet when grouped into words may be most significant. A diagnosis in most cases should rest upon a group of data which together spell out a word.

The harm done by the attempt to separate our examination of the patient's functions into two sharply differentiated portions, and to assign one portion to the individual known as the "laboratory man" and the other to someone called a "clinician"—the harm, I say, done by this attempt consists in part in a loss of essential facts in the attempted transfer from one man to another. For such data are not readily transferable, like coin, without loss of value. Few can interpret the results of a blood examination, or a urinary examination, unless they are constantly making such examinations themselves. Indeed the at-

tempt so to interpret them is almost as hopeless as the attempt to convey satisfactorily to another what one feels in palpation of the abdomen. Laboratory facts are *personal* facts as much as the results of palpation, and they are almost as difficult to convey to a second person. Moreover, our interpretation of the crude data obtained by our senses is apt to be a very faulty one, if we attempt, as a so-called laboratory man often has to do, to make this interpretation wholly uninfluenced by the clinical aspect of the case. Those best trained in microscopical and chemical analyses are coming more and more to feel unwilling to hand over to another man any hard and fast conclusions based upon the isolated facts in his possession. More and more we are finding that the men who examine scrapings or fragments of a tumor, want to see the case in the wards, and to get possession of all the facts ascertainable, just as the clinician is more and more unwilling to accept a report from the laboratory without seeing the specimens himself.

Dr. Welch has pointed out in a most timely way, in a recent discussion in the Johns Hopkins Hospital Bulletin, how unwise it is to attempt to construct clinical histories from postmortem evidence. But the evidence obtainable by what we still insist on calling "laboratory work" is usually as one-sided as the postmortem evidence just alluded to. It needs to be filled out and corrected by facts obtainable only at the bedside.

Summing up what I have said, it seems to me (1) that we need to direct the great current of scientific medicine, first by observing a due proportion in the amount of time and the degree of accuracy assigned to the different portions of our examination of a patient, and (2) that we want to rub out as fast and as far as possible the distinction between laboratory diagnosis and clinical diagnosis.

A CONTRIBUTION TO THE STUDY OF VARICOCELE.*

By DUDLEY TAIT, San Francisco

(From the Surgical Laboratory of the Medical Department, University of California.)

THE HISTORY of varicocele is that of its treatment. Few morbid conditions have received more attention from clinicians than has varicocele; and, although its pathological and clinical description are of comparatively recent origin, mention of its treatment is made as early as the first century by Celsus, who was the first to write with any degree of precision on the subject. Celsus practiced the radical cure of varicocele, which became the treatment of choice under Paulus Egineta, Guy de Chauliac, Franco and Ambroise Paré. This procedure reigned supreme to the middle of the eighteenth century, when a new era was ushered in; the "good hot wine" was abandoned for ointments and emollients, thus frequently inducing heretofore rare complications—phlebitis, purulent infection, etc.—and explaining the formal interdiction of operative methods by all contemporary classic authors. The resulting period of operative abstention was followed by an era of bloodless or conservative surgery (compression, crushing, burning, seton, acupuncture, galvanopuncture, coagulating injections, etc.), none of which procedures proved infallible or innocuous. Hence, the general discredit of all operative methods in varicocele until the dawn of the Listerian age. These diverse fluctuations may be of interest to the student as illustrative of the various doctrines which from time to time guided surgical interventions.

Etiology.—Our knowledge of the etiology of varicocele is nil. Writers of text-books continue placently to reiterate a long list of incongruous

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anatomical factors, and teachers, with childish unanimity, seldom fail to burden their students with these same fallacies. Others would render the problem still more obscure by ascribing varicocele to embryologic modifications! (Escat.) The study of the cremaster as a causative agent in varicocele is not devoid of interest. First mentioned by J. L. Retit (1707), thoroughly investigated from the double standpoint of anatomy and physiology in the thesis of Périer (Paris, 1864), and again considered by Segond (1885), this theory, like numerous other European creations, slowly drifted across the pond, and in 1892 was rehabilitated by McGraw as an "original contribution."

The cremaster muscle passes along the cord, through the inguinal canal and the external abdominal ring, into the scrotum, where it almost encircles the cord. The lower, dissociated fibres pass anteriorly and posteriorly to the testicle, forming a concave support for the latter. The cremasteric fibres are attached to the external surface of the cremasteric fascia, *i. e.*, to the prolongation of the transversalis fascia. The action of the cremaster is strikingly illustrated in abdominal strain or severe coughing; its fibres contract simultaneously with the muscles of the abdominal wall, causing compression of the veins within the inguinal canal, elevating the testicle, drawing taut the fibrous sheath of the cord, thereby compressing its vessels and compensating for the insufficiency of the valves in the spermatic veins. In individuals with relaxed dartos and undeveloped cremaster, the spermatic veins are unable to cope with the effects of increased pressure. Hence, dilatation and possibly stasis. Observation of the cremaster during radical cure of hernia, with and without varicocele, coupled with the partly established relation between the condition of the valves of the spermatic veins and the development of the cremaster, apparently point to the latter as a factor in the production and prevention of varicocele. Vastly more important from every point of view is the question of:

Frequency of Varicocele.—Varicocele exists in one out of three or four males between the ages of 18 and 30. That a difference of opinion prevails in France and England, and also in this country, as to what constitutes a pathologic condition of the spermatic veins, is evidenced by the percentages of rejection of recruits in these countries. Thus in England we find 2.3%, and in France only 0.16%. In the vast standing army of France the percentage of men retired yearly from service on account of varicocele averages only 0.013% (Gaugot); no increase has been noted in the cavalry regiments. Senn, in examining 9,815 recruits for the Spanish-American war, found varicocele present in 2,078. One-half of these were entirely ignorant of the condition, and only three or four acknowledged the slightest discomfort or pain. The frequency of slight varicocele in genito-urinary neuropaths is unfortunately too well known. In no case, however, are the genito-urinary disorders (pollakiuria, dysuria, lumbar pains, spermatorrhea, impotency and other sexual neurasthenic symptoms) due to the venous abnormality. While the patient attributes all his symptoms to varicocele, his attention has almost invariably been attracted to this benign lesion through the influence of a physician, or by some "confidential scientific literature."

Pathological Anatomy.—The pathology of varicocele is variable. Cases differ from one another, both as regards causes and pathologic conditions. However, the complete development of varicocele generally comprises two stages: First, dilatation; the majority of varicoceles show no further progress. In such cases the veins are not varicose; the walls remain thin. Secondly, the dystrophic disturbances characteristic of chronic phlebitis; *sclerosis* and

hypertrophy of the muscular layer. The sclerotic lesions occur late and very gradually; unlike those of arterio-sclerosis, they are generally restricted to a small area. Cases showing varicose involvement of the entire spermatic vein have been reported (Segond). The intra-testicular venous plexus may also be involved (Curling).

Associated sclerotic lesions of the periprostatic venous plexus are mentioned by Guyon and Segond. In certain voluminous or rapidly developing varicoceles, the testicle may be smaller and softer than normally, but the cause and nature of this condition have never been satisfactorily explained. The pathologic results of passive congestion so well illustrated in chronic cardiac lesions (hepatic cirrhosis, etc.) are not demonstrable in patients with pronounced varicocele. Hence, while the testicle may in some instances become softer, the sclerosis, with consequent testicular atrophy, mentioned by some writers as a sequel to varicocele, is very seldom marked. The frequency of chronic vaginalitis in old varicocele may account for the slight degenerative lesions in question.

The following table summarizes the varieties and extent of the lesions in varicocele:

1. Total, in which all the veins are involved.
2. Anterior, in which the anterior group alone is affected.
3. Posterior, in which the posterior group alone is affected (rare).
4. The epididymal form, in which the veins of the globus minor are affected (very rare).

In another group of patients, varicocele may be associated with a series of abdominal conditions (dilatation of stomach, floating kidney, hepatoptosis) indicating insufficiency of connective tissue. A still rarer category is the symptomatic varicocele of Guyon (abdominal and renal tumors). Peri-epididymitis has been noted in the epididymal variety of varicocele (Mignon and Sieur). *Many surgeons fail to examine properly their varicocele patients.*

Palpation of the cord is inadequate. The patient should be examined in the vertical and horizontal positions. The condition of the testicle and adnexa (epididymis, tunica vaginalis, vas) must be carefully noted. Furthermore, the circulation and degree of stasis in the spermatic veins should be tested, first, by elevating the scrotum, and thereby emptying the veins; second, by inserting the tip of a finger into the inguinal canal. Upon withdrawing the finger a sudden reflow of blood will frequently be noted in the dilated veins, thus demonstrating the insufficiency of their valves.

Treatment.—The firm belief from time immemorial in an intimate relation between varicocele and innumerable physical and mental disorders explains the unceasing attention given by surgeons to this condition and the consequent creation of an endless list of surgical measures for its relief. It would appear, however, that centuries of study have been for naught; to-day the method of choice is that resorted to by the surgeons of ancient Rome—resection of the veins. The well-nigh universal favor with which the latter procedure is held was forcibly illustrated at a recent State Board (California) examination, when 68 out of 69 applicants advocated this mode of treatment.

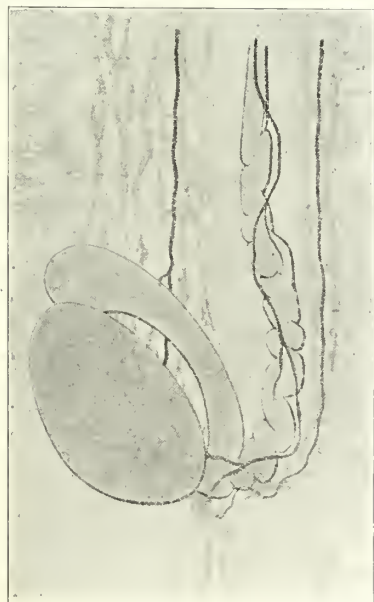
Resection of the Spermatic Veins.—The extremely variable technic of resection of veins is already an indication of an imperfect method. Many surgeons, without sound pathologic reasons, invariably resect a single group of veins, either the anterior or posterior; others remove a few veins from each group. The majority, however, ligate the cord "en masse" minus the vas. While the vas may be easily recognized and avoided, the spermatic artery, on the contrary, is seldom seen in dealing with the anterior group of veins; even upon the cadaver its detection

is difficult. In the opinion of Bennett, after resection of the spermatic veins there is an over-supply of blood without the proper means for its return, as evidenced by "post-operative softness and fatty degeneration of the testis." From these doubtful pre-



No. 1. Lower fibres of cremaster-scrotal ligament with included veins.

mises Bennett deduces the necessity of ligating "en masse" the entire cord, excepting the vas.¹ To those who would emulate such unscientific conduct, the following facts should be recalled:



No. 2. Arterial supply of the testicle and anastomotic veins below.

First, collateral circulation through the cremasteric and deferential arteries is usually present, but may be wanting, as illustrated in the not altogether

¹Amussat (1828) was the first to ligate the spermatic artery in voluminous varicocele.

infrequent occurrence of testicular atrophy following resection of the veins.

Second, the sad and unmerited fate of the distinguished French surgeon, Delpech, who was assassinated by a patient suffering from bilateral testicular atrophy consequent to an operation for varicocele.²

Arguments Against the Usual Operation of Varicocele (Excision of Veins).—First, from the standpoint of pathology, it is not rational. In the great majority of instances the veins do not offer marked lesions; they are simply dilated; the walls remain thin and show no sclerotic changes. The dystrophic lesions occur much later and more gradually than in varicose veins of the lower limbs, and apparently indicate nature's method of controlling ectasia of the veins.

Second, the severe and not altogether harmless character of the operation is not warranted in an affection, which in most instances may be called an innocent "phantom tumor."

Third, recurrences after excision are not unknown, and complications are rather frequent. Indeed, according to English authors, softening of the testis invariably occurs after resection of the veins.

Fourth, the frequent association of hydrocele and varicocele, especially in old and large varicoceles (25 to 30%), calls for a simpler method, capable of curing both conditions.³

Fifth, the modern operation of resection of the veins may be safer than those of ancient times, but our late results are in no sense superior to those reported by Celsus.

Resection of the scrotum, first advocated and resorted to centuries ago by Cumano⁴ (of Trieste) was a step in the right direction.⁵ This mode of making what has been called a "dog scrotum" exposes to well-known complications and to not infrequent recurrences. In my experience recurrences are more frequent in the transverse resections than in the antero-posterior. In a series of 67 resections, Annequin reports 21 recurrences. Subcutaneous shortening of the scrotum by purse-string silk ligature (Nimier) likewise exposes to relapses.

It is my belief that in view of the foregoing statements a rational and efficient method of treatment for varicocele should fulfill the following conditions:

First, no tissue should be removed.

Second, the arterial and nerve supply of the testicle should not be endangered.

Third, the operation should be simple, rapid, bloodless and devoid of great pain.

Fourth, the patient should not be compelled to remain in bed.

I believe all these conditions are fulfilled by the operation of *transposition* (Longuet) of the testicle combined with eversion of the tunica vaginalis. This operation is begun as for eversion of the tunica in hydrocele, with, however, the following modifications: The scrotum is held firmly by the assistant, who pushes the testicle upward 5 to 8 cm., according to the degree of laxity of the scrotum and the level of the opposite testicle. Under local, or exceptionally spinal or general anesthesia, a 4 to 5 cm. incision is made directly over the upper pole of the elevated testicle. A similar opening is made in the tunica, care being taken to carry the incision suf-

²The absence of collateral circulation in the dog explains Sir Astley Cooper's error in laying great stress upon the sloughing of the testis in experimental ligation of the cord.

³Finney, of the Johns Hopkins Hospital, and Chas. Mayo, of Rochester, invariably evert the tunica after resection of the veins for varicocele.

⁴Resection of the scrotum is erroneously attributed to Sir Astley Cooper (1839).

⁵Chassaignac, by a single application of his famous ceraseur, resected the veins and a portion of the scrotum, thereby elevating the testicle. This identical principle reappeared in the so-called "Bennett operation."

ficiently high to avoid all folds or *culs de sac*. By means of pressure from behind, the assistant now luxates the testis from its serous sac, and then lifts it gently upward between two fingers, strictly avoiding traction upon the cord which will invariably



No. 3. Incision over elevated testes.

cause pain and nausea. The different scrotal layers retract in the direction of the cord, the posterior surface of which comes directly into view. Laterally are the edges of the retracted tunica which are sutured around the cord, including the subjacent



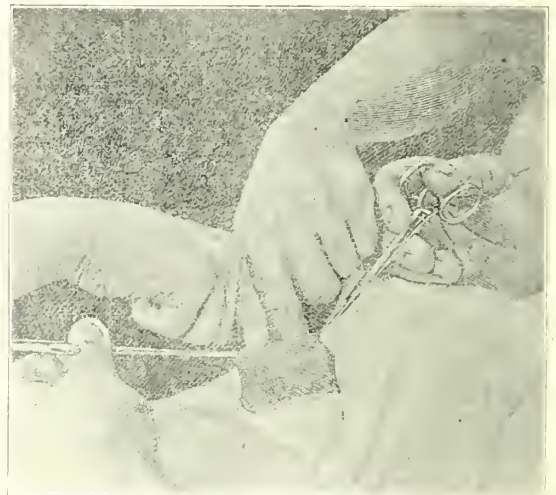
No. 4

cellular tissue and approximating the edges of the serosa in such a manner as to make a snugly fitting, natural elastic bandage, as high as possible, around the cord. A continuous or interrupted catgut suture may be used. All folds in the tunica should be avoided. Both index fingers are now inserted into

the loose connective tissue adjoining the raphe about 6 to 8 cm. higher than the original position of the testicle, and then rapidly separated a distance of 5 or 6 cm. This step is both painless and bloodless. The testicle is then carefully dropped into the resulting cavity."

In its new position the testicle is slightly twisted on its axis, being in retro-lateral version instead of in normal anteversion. A similar twist occurs in the cord, and serves to augment the pressure upon its blood vessels. The scrotal wound is closed either in the transverse or vertical plane by means of Michel's staples, which constitute an ideal suture for wounds of this region. A small gauze pad and a suspensory complete the dressing. It is unnecessary to keep the patient in bed after the first day. The staples are removed and the dressing changed on the fifth day. Both dressing and suspensory may be dispensed with after the first week.

Local Conditions Subsequent to Operation.—Habitually, the reaction is nil. In exceptional cases, necessitating slow dissection of the tunica (chronic vaginalitis), some tenderness and infiltration may supervene, but rarely last more than two or three



No. 5. Making a new pouch for the testicle.

days. Mobility of the testicle may be noted as early as the second day. It is invariably present at the time of the removal of the staples. Upon close examination an anterior meso-testis will be noticed corresponding to the scrotal incision. It was the existence of this anterior attachment (first noted in *Annals of Surgery*, April, 1901) that prompted both Longuet and myself to transpose the testicle in varicocele. After a few weeks the position of the testicle may be somewhat lower than at the time of the operation, but it will not descend to its original level. Its mobility gradually increases, and during the

"The elevated position of the testicle can be made more secure by using the ends of the highest suture of the serosa in closing the upper part of the scrotal incision.

"In Longuet's operation for varicocele, a sheath is made for the cord up to the inguinal orifice, using the cremasteric fascia above and the everted tunica below. The testicle is then transposed. In Parona's operation, the edges of the everted tunica are sutured to the pillars of the inguinal canal, thus elevating the testicle and covering the vessels of the cord, some of the veins of which may be resected, if necessary. Mauclair, after resection of the veins, sought to elevate the testicle by suturing it to its fellow through the raphe (interstitial anastomosis).

"The testicle invariably descends after resection of the veins. Phocas ascribes the descent of the testicle in varicocele to the shortening of the scrotal ligament. In his operation the scrotal ligament is cut and the testis raised without opening the tunica.

fourth week compares favorably with that of the opposite testicle.⁸ The everted tunica gradually retracts in the direction of the testicle, forming a dense compressing sheath to the inclosed vessels. Palpation of the lower portion of the cord illustrates these facts conclusively. The appearance of the scrotum on the operated side shows the effect of the new position occupied by the testicle.

Results.—Having operated only five times during the past year by the above described method, I can offer but very meager data upon the all-important chapter of results. Two classes of cases were treated: First, painful varicoceles (two cases); second, voluminous varicoceles (three cases). In the first class the painful symptoms ceased as early as the third day. In one of these cases the testicle showed an appreciable increase in size shortly after the operation. In the three cases of voluminous varicocele the scrotum soon retracted to the new position occupied by the testicle. Palpation showed collapse of the spermatic veins in all three cases, and in one case a slight dilatation of the veins in the region of the globus minor. None of the patients wear a suspensory. Sufficient time has not elapsed to warrant conclusions regarding late results.

From numerous experiments on animals, I was able to demonstrate the following facts:

First, a new collateral venous circulation as evidenced by loose and very vascular connections between the albuginea and the surrounding cellular tissue.

Second, an increased normal collateral circulation, as illustrated by the marked development of the intra-testicular vessels and the great development of the veins in the scrotal ligament leading from the testicle to the walls of the scrotum.

Third, numerous macroscopic and microscopic sections of the testes failed to reveal degenerative lesions. Active spermatozoæ were invariably found in the vas in each of the above experimental cases, the majority of which were examined six and nine weeks after operation.

Fourth, a new fibrous capsule may be noted as early as the second month after operation. This may account for the rare cases of recurrence after total excision of the tunica.

Operative Indications.—In civil life, varicocele is not looked upon as of any moment, and it can be truly stated that, excepting in applicants for the army and navy or for positions in some public departments, operations are very seldom necessary, or even justifiable.⁹

In the military and naval circles of this country alone much importance is attached to varicocele, and the expediency of its treatment by operation was not long ago urged in a widely circulated report emanating from the office of the surgeon-general. Hence, the vast number of such interventions in military hospitals. However, the high character of the recent work of the medical department of the United States army amply compensates for the above egregious blunder. In the great armies of France, Italy and Belgium varicocele operations are of excessive rarity (Dardignac).

The treatment of the vast proportion of varicoceles in sane individuals calls for nothing more than the temporary use of the suspensory and some local hydrotherapeutic measure.

The following, modified after Sébilleau, is presented as a resumé of the operative indications in varicocele:

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| One should operate. | { | 1. Large or painful varicocele, inducing testicular atrophy or marked endophlebitis. |
| | | 2. Varicocele causing the rejection of candidates for certain positions (army and navy). |
| One may operate. | { | 1. Voluminous, painless varicocele, equivalent to an appreciable deformity. |
| | | 2. Smaller varicocele at the patient's repeated request to be rid of an infirmity. |
| One should never operate. | { | 1. Varicocele in genito-urinary hypochondriacs or in neurasthenics. |
| | | 2. Simple dilatation of the veins inducing no symptoms. (The most common form of varicocele.) |

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TREATMENT OF TYPHOID FEVER.

By RAY LYMAN WILBUR, M. D., Stanford University.

(Continued from page 345.)

Drugs.—The drug most used was a teaspoonful dose of saturated solution of magnesium sulphate, one to three times a day, and it usually did very well. At the very onset of each case, and frequently thereafter, when the constipation or the fermentation were troublesome, calomel in small doses ($\frac{1}{4}$ grain), with sodium carbonate (1 grain), repeated every half hour for three to six doses, and followed by milk of magnesia $\frac{3}{4}$ ss, was most useful. Later, in many of the cases, the ordinary compound rhubarb pills or compound licorice powder were used with success. Pills containing aloes, or, in fact, the vegetable products in general, should not be used during the period of active ulceration; for the form of peristalsis which most of them excite is, in my opinion, more apt to induce hemorrhage.

Treatment of Hemorrhage.—Nine cases of severe hemorrhage came under observation. Of these cases, one patient died from hemorrhage (autopsy), one probably from perforation following hemorrhage (no autopsy), one from perforations four days subsequent to hemorrhage (autopsy), one four weeks after hemorrhage from a general toxic condition, endocarditis and embolism. The treatment of these cases was as follows: First, the nurse was in each case fully instructed what to do if blood appeared in the stools, or the temperature suddenly dropped without evident explanation, or the patient's thirst or pallor suddenly increased with coincident weakness of pulse. Elevation of the hips, absolute rest in bed

⁸During six years of work in the Paris hospitals, I saw fewer operations for varicocele than during a period of six months in this country; two recognized surgical authorities in that city (Trelat and Le Fort) had never, in twenty years of hospital service, observed a varicocele requiring operation.

⁹See page 366.

on the back, two ice coils and two or three large, flat ice bags to the abdomen, no food or fluid by stomach except as given below, all routine orders stopped. Hypodermic injections of 15 to 30 minims of fluid extract ergot (prepared for injection) is to be given, to be repeated in two hours or sooner, and the patient is given by the mouth, in a small amount of water, 1 grain of fresh gum or powdered opium every one to four hours, according to the symptoms and the amount of peristalsis. If pulse is no better following ergot, give a hypodermic of 30 minims of brandy; if still no better, use strychnin 1-30 of a grain hypodermically, but in no case nitro-glycerin, because of its vasodilator effect. It is better not to stimulate unless absolutely needed, as arterial pressure, and hence hemorrhage, is increased. *In case the bleeding persisted in spite of above measures, and the pulse became thready and uneven, a saline infusion of from one to two pints was given, usually under the breast. This seemed always to be beneficial, and in one case of a most severe hemorrhage, undoubtedly saved the patient's life. It was also helpful in allaying thirst. In two fatal cases it was interesting to note that it was not absorbed. Nothing except the opium pills, with enough water to wash them down, was put into the stomach for twenty-four to thirty-six hours; then a few drops of Valentine's beef juice in a couple of teaspoons of water was given. Careful observations were made with the stethoscope of the amount of peristalsis during the frequent visits that all hemorrhage cases require. If the hemorrhage was controlled and the heart promptly recovered, the ergot was stopped at the end of twenty-four hours, the opium at the end of forty-eight hours, unless given up before on account of signs of opium poisoning, the stimulants used only when absolutely required, and the beef juice and ice water were given every two or three hours for the second twenty-four hours; the ice to the abdomen was continued for several days. It was found that beef juice or liquid peptonoids, especially when given alone, soon had a laxative effect, probably due to peptones contained, and so they were usually stopped at the end of forty-eight hours, and predigested slightly diluted milk $\frac{51}{51}$ to $\frac{58}{58}$ every one to two hours was given. Absolute rest on the back was continued for from forty-eight to eighty hours. When conditions were going favorably, the turpentine oil emulsion in small, frequently repeated doses was begun in twenty-four to thirty-six hours after the hemorrhage, and continued for some days. The bowels were in no way disturbed until the fourth day, and then a glycerin enema was used. Full feeding was given at the end of one week, and a mild bowel cathartic was used then, also, if needed. Hypodermic injections of morphin were found to induce vomiting, and not to control the peristalsis as well as the powdered or gum opium. In the more desperate cases where the hemorrhages were uncontrolled by the above measures, and more particularly in one of the fatal cases, where the blood was passed unclotted, calcium chlorid, fused, 5 to 15 grains was given in a small amount of water by the mouth, and thick gelatine broth (made from pure gelatine and a few drops of beef juice) was given in a small quantity. Whether these measures were beneficial, I am unable to state, but in this case some clotted blood was passed before death. There was a history of some hemophilia in the family. Epinephrin (1-1,000 sol.) was used in two cases; one of the patients died from hemorrhage (autopsy), and one of apparent perforation following hemorrhage. It was given in small quantities 2 to 30 drops in small amounts of water by mouth every half hour for some hours. Its effect

upon the tone of the heart and the pulse was noticeable, but any control of the hemorrhage was limited and not permanent in its effect. Unless its vasoconstrictor effect with increased blood pressure is steady and lasting, its value is most dubious, and it is hard to know which is better, the low pressure following the hemorrhage with its tendency to allow coagulation, or the use of stimulants and vasoconstrictors, favoring higher pressure and smaller bleeding surfaces. I feel convinced that only very careful and conscientious observations will be able to tell us whether it does harm or good in such cases. The mucous membrane of the stomach of the autopsied patient was markedly congested and hemorrhagic in appearance, a condition that I ascribed to the local effect upon the stomach wall of the epinephrin. It is necessary to state that this patient had at some time during the prolonged illness, hemorrhages from the nose, bowel, uterus, bladder or kidney and from the stomach.

Collapse.—The most striking characteristic of the cases observed were these circulatory collapses. They appeared in severe afebrile cases, as well as in those with highest temperature, regardless of treatment given previously, and were evidently due to the severity of infection. It is of interest to note that they never occurred during an ice pack. The first collapse was difficult to treat because of the fear that it might mean hemorrhage or perforation, but it was thought safer to assume the second one in the same case as collapse, and so treat it vigorously from the outset. Severe collapses were noted in eighteen cases. They were most startling in character, and several times I was told over the telephone that the patient was dead, only to find him getting better, under the routine ordered, when I reached the house. The temperature would frequently fall, even below 96° or 95° F., the pulse disappear from the wrist, and the patient lie apparently lifeless. This happened no fewer than eight times in one patient, the man eventually recovering. His skin became so tough at times that it was difficult to insert a hypodermic needle, and injections made at that time, if not made deeply, produced superficial sloughs.

The routine ordered for the first collapse was as follows: Remove all applications of cold, place hot applications to the feet and the sides of the body (but not to the abdomen), rub the extremities, inject at once 1-30 grain of strychnin and 100 minims of brandy. If not immediate favorable result, repeat the brandy and then in succession give a hypodermic of camphorated oil 10% (20 minims), then ether 10 to 20 minims in equal parts of olive oil; then if still no pulse at wrist, give ii grains caffeine citrate hypodermically in warm solution, and repeat camphorated oil and ether and oil alternately every ten to twenty minutes until there is a noticeable result. In case it was reasonably sure that there was not a hemorrhage, 1-50th of a grain of nitro-glycerin was added to the first injection, and this was repeated in two or three hours if needed. The after-treatment of an attack was a most careful stimulation with brandy, strychnin and nitro-glycerin, with the use of small quantities of hot foods and drinks and the use of warm applications until the temperature began to rise. Such treatment may seem drastic, but its prompt use saved several patients for me, and saved three of them over and over again. Collapse cases had always ready for use hypodermic syringes filled with the above solutions, so that no time was lost. In one case where the ether and oil was used it took sixty-five seconds for an imperceptible pulse at the wrist to become plainly perceptible. Because of the severe type of infection in many of these cases, there was a good chance to prove the great value of camphor and ether, as heart stimulants especially. The great essential in the treatment of such a complication is to be prepared, so that *no time is lost* filling syringes or sending to the drug store or for the physician. The nurse must act at once, and must know what to do.

*Strychnin was used when there had to be a choice between two evils, and when the circulatory danger overbalanced the fear of exaggerated peristalsis. Caffein was found particularly valuable for stimulation when opium was being given, and it did not seem to noticeably increase the peristalsis.

Perforation.—Four cases of perforation came under my observation, with one other probable case; two of these patients died. No operations were performed. The treatment was almost identical with that for hemorrhage, with the exception that no epinephrin or calcium chlorid was used, and that feeding was not begun until the end of the third day, except for small amounts of beef juice at the end of twenty-four to thirty-six hours. The results were very satisfactory in two cases, though in one case it was very difficult later to bring about a bowel action and to reduce the immense distension of the abdomen. This was finally accomplished by hot turpentine stupes to the abdomen, turpentine by mouth and per rectum, and small doses of calomel. In one fatal case death was due to a second perforation into the free peritoneal cavity high up in the small bowel the third day after the first perforation in the iliac region. The autopsy showed that the first perforation under the above treatment had become completely walled off from the peritoneal cavity, and, although the perforation in the cecum was as large as a 25-cent piece, recovery would probably have followed except for the severity of the infection and the second perforation. My observation in these cases leads me to doubt the advisability of surgical treatment, except in perforation during convalescence. To submit a patient in such a profound state of infection and collapse to an abdominal operation, and the manipulation and sewing of a thoroughly diseased bowel, seems to me questionable treatment, unless done immediately and under the most favorable circumstances. If peristalsis can be promptly controlled, the hope of recovery is fairly good without operation, and the risks of an operation, particularly where the condition is doubtful, are very great.

Pneumonia, as a severe complication, was met five times, and no patients were lost, although one had a temperature of from 104.5° to 106° F., a pulse 140 to uncountable, and respiration 50 to 80, for several days. The treatment was one of stimulation, oiled silk jacket to chest and oxygen inhalations. Particularly valuable in controlling the cyanotic attacks was the inhalation of turpentine fumes, from turpentine placed on hot water. The ether and camphor was used freely hypodermically when needed, and the most desperate cases recovered finally, having taken over 3ii each of 10% camphorated oil and ether and oil aa within a week's time. The oxygen was found very valuable when intermittently administered. No expectorants were used because of the need of all possible nourishment by the patient and the fear of digestive disturbance, although oil of eucalyptus, tincture of benzoin compound and oil of white pine, aa, were vaporized in the room constantly.

In conclusion, I would say that the great thing in the treatment of a typhoid case is a careful study of the patient and his surroundings, of all the evidences that we can discover of the reaction of each organ to the toxins damaging it, and of a most detailed and painstaking attempt to help his system in every way; but above all to see that he digests and eliminates properly.

MYOCARDITIS, WITH SPECIAL REFERENCE TO DISORDERED METABOLISM.

By DR. W. W. KERR, San Francisco.

(Continued from page 343.)

A recollection of the physiological effects of these baths will always guide us in the selection of suitable cases as well as in determining the line of treatment adapted to each individual. As the temperature of the bath is from 3° F. to 10° F. below that of the body, the first influence is a contraction of the peripheral vessels, followed by reaction and then dilatation, a change that generally takes place during immersion, but which may be delayed until the period

of rest, when the patient has been removed from the bath. This is associated with stronger but slower heart action, so that, as a result of the combined effects, we should have an improved circulation through general, pulmonary, and portal systems. According to Schott, this is accomplished by the influence of the carbonic acid and salts upon the skin, and also by their absorption into the corium, so that they have a prolonged effect upon the peripheral nerves and reflexly influence the vaso-motor system.

Cases of arterio-sclerosis so advanced that the vessels may not react, and patients suffering from myocarditis of such a degree that it is doubtful whether the heart muscle will endure the strain, must always be treated with the greatest care, the period of immersion should be short and the amount of mineral salts and gas in the bath very small; should the patient improve, the bath may be made stronger and the immersion longer, but if he should fail to react, then the bathing should be abandoned entirely or temporarily until the resistance movements have rehabilitated the cardiac muscle.

The treatment is also of diagnostic value, because the readiness with which the heart responds to it enables us to form some opinion regarding the reserve power of the myocardium. Patients who are too weak to use the baths, or are so situated that they cannot obtain them, are frequently benefited by the resistance movements; but these must also be conducted with caution in regard to degree of resistance, variety of movement and duration of treatment, any increase in dyspnea or the onset of precordial distress being an indication for rest and diminution in amount of resistance. What has been said is not to be taken as in any way approaching a full description of the Nauheim treatment; it is only an attempt to indicate in the few words that are possible in this lecture the points that should influence the adoption of the method, and also it is intended to emphasize the fact that dosage in regard to temperature of bath, amount of minerals and gas present, and period of immersion is as important in this as it is in the medicinal treatment. The pamphlets issued with the artificial salts give instructions regarding the amount of salt to be used in fifty gallons of water, but my experience has been that a comparatively large number of nurses, and physicians also, have very hazy ideas regarding the volume occupied by fifty gallons of water, and therefore, as has been already said, the treatment is haphazard, and failures are attributed to the method which in many cases are due to the ignorance or carelessness of the physician. If the attendant measures the cubic space occupied by the water in a bathtub, and remembers that every cubic foot of water corresponds to practically 6.25 gallons, he will then know how much of the salt should be added to bring it to the desired percentage. This a bath 5 feet long, 20 inches wide, and in which the water is 9 inches deep before the immersion of the patient, would contain (60 in. × 20 in. × 9 in.) 6.3 cubic feet of water, and therefore 6.3 × 6.25 gallons = 39.375.

While the baths can be given at home, the treatment is generally conducted with better results at a sanitarium, for various reasons: the bathtubs are longer than those generally found in private dwellings, so that the patient can lie in a more nearly horizontal position, and be more comfortable; the attendants are better trained to this individual class of work, and the immediate effects of each bath can be noted by the resident physician; furthermore, at a sanitarium the treatment becomes the main feature in the patient's daily life, while at home it is very difficult to keep him free from disturbing influences.

A full account of this method and its results will be found in the writings of Schott, Bezly-Thorne, Leith and others who have given the subject special attention, and I would only add that the experience of succeeding years only more thoroughly establishes

its value as a therapeutic agent in this treatment of myocardial disorders.

Medicinal Treatment.—The remedies that in my hands have given the best results when treating this class of cases are mercurials, colchicum, iodides, arsenic and strychnia. If there is much loss of compensation it may be necessary to use digitalis or strophanthus as an aid to its restoration; but these will prove ineffectual unless the disorders of alimentation receive particular attention.

The effect of mercury in myocardial troubles is not sufficiently appreciated; the benefit is not simply a result of purgation which could be accomplished equally well by a saline or any other form of cathartic, not merely the removal of dropsy and edema so that respiration is less embarrassed, but clinical experience from the days of our grandfathers until the present time testifies to the value of mercurials where none of these conditions exist, records the relief from angina pain and precordial distress that has followed its use in such cases as we have just reported, and although the laboratory has exploded many of the theories which sought to explain these results, the clinical fact still remains, and we can only hope that some day the laboratory will be able to furnish us with an explanation. No doubt much of the improvement is due to an increased activity of the lymphatics and glandular system generally, so that exudates and toxins are rapidly absorbed and excreted, the blood purified and the quality of the glandular secretions thus improved. When simply the alterative effects are desired it is my custom to use the proto-iodid of mercury in doses of one-quarter of a grain three times daily for two days, and in addition to this a saline aperient every other day, as this mercurial salt in such doses very often causes constipation; but when there is edema or dropsy then the squill digitalis and bluemass pill three times daily, or one grain of calomel or five grains of grey powder given with the same frequency, for several days, has been found to be more satisfactory. The selection of any one of the three first mentioned preparations depends upon the tendency of one or the other to produce gastric disturbance in the patient.

Where there is a distinct gouty tendency on the part of the patient the mercurial treatment should be followed by the administration of colchicum in moderate doses for three or four weeks, but when cardiac distress is associated with a gouty attack, I have not hesitated to give the colchicum in full doses from the start, and at the same time use a mercurial purge for three or four days in succession.

It is not to be expected that all cases of cardiac disturbance due to faulty metabolism will be cured so soon as the diet has been corrected and the toxins removed; unfortunately in the majority of cases the trouble has continued so long that extensive structural changes have taken place, and all we can hope to do is to arrest or delay their further progress. It is on this account that in an earlier part of the lecture a careful scrutiny was urged of all cases of so-called functional disturbances of the heart when there was any enlargement of the liver or disturbed digestion.

At this stage, where the object is to improve nutrition and give tone to degenerating myocardial fibres, the simultaneous use of strychnia and arsenic is strongly indicated. The mere fact that there is intolerance to the average dose of arsenic is no reason for discontinuing the drug; it should, under such circumstances, be given in infinitesimal doses, and continued for a considerable length of time.

I hope that what has been said about the relationship between the foregoing cases and metabolism will not leave the impression on your minds that I attribute all myocardial changes to disordered portal circulation; it is only my intention to emphasize the fact that this is the case very frequently, and that in all cases of myocarditis, irrespective of the cause,

very strict attention must be paid to the patient's dietary. When we reflect that the blood from the stomach, intestines, pancreas and spleen combines to form the portal circulation, and that the liver stands as a protecting barrier between these and the general circulation, we need not wonder if very often the solution of the problem, Is life worth living? will be found in the liver.

Closely related to the cardiac lesions which may be attributed to disorders of the alimentary tract are those consequent upon disease of glands not directly associated with alimentation, but which are occupied with the destruction or excretion of poisons formed within the body, and consequently failure of their activity may lead to accumulation of toxins which either directly or indirectly affect injuriously the myocardium. Reference is particularly made to the thyroid and supra-renal glands, and also to the kidney. The cardiac symptoms so frequently found in cases of exophthalmic goitre are so familiar to everyone that description is not necessary, and the relationship between the diseased thyroid and the cardiac condition is still such a matter of uncertainty that it is not possible to say much in regard to treatment; but we do know that the administration of cardiac tonics never amounts to more than a treatment of symptoms which, in the majority of cases, is a complete failure, and consequently our hope must be for a treatment based upon the pathology of the disease, meagre though it may be. The tendency of experimental work is to indicate that the disease originates in the nervous system, and that, as a result of pernicious nerve influence, the thyroid function is prevented so that there is an excessive, or possibly an abnormal secretion which is responsible for the production of the characteristic symptoms. Upon this supposition much attention has been given to the production of a serum from animals whose thyroids have been removed; the results obtained from the injection of this preparation, while not sufficiently numerous to establish its value as a therapeutic measure, are at least so encouraging as to warrant further investigation.

Disease of the supra-renal glands is associated with a very marked myocardial asthenism against which all the usual cardiac tonics are of no avail, and even the injection of epinephrin solution has not yielded any beneficial results, although its action as a cardiac and vaso-motor stimulant under other conditions is well established. It is therefore possible that toxins exist in the blood which are normally attracted to the supra-renal bodies and there destroyed; also that epinephrin is not an antitoxin, as was at one time supposed, but a secretion whose purpose it is to modify the blood pressure in the gland according to the demands made upon its activity.

We are more familiar with the cardio-vascular changes in nephritis, but to what extent these are dependent upon disturbed renal function, and how far they are due to other disturbance in the human economy is an open question. I feel myself to be at a disadvantage in making any reference to this subject at such a time as the present, as it can only be fairly discussed by considering the whole subject of uremia; but on the other hand, there are so many reasons for the belief that the cardio-vascular changes are not entirely secondary to nephritis, but also due to an accompanying vitiated metabolism, that it seems hardly right to pass the matter by without mention, although it must suffice for the present simply to state some of the reasons for such a belief, and leave their discussion to some future occasion.

The temptation is very great to ascribe the cardio-vascular changes to the effect of prolonged high blood pressure rendered necessary by an endeavor to produce an increased functional activity of the healthy portions of the diseased kidney so that a normal amount of urinary excreta may be eliminated through a diminished excreting area. This, therefore, attributes the disturbance in the circulatory system

to diminution of kidney substance. Experiments upon animals are, as a rule, opposed to such a conclusion; but probably the best comparison can be made with human beings who have been the subjects of nephrectomy, and, so far as can be ascertained, it is generally admitted that if the other kidney be healthy at the time of operation, there is not any reason to apprehend the development of a subsequent nephritis, nor any of its accompaniments, from the additional work thrown upon the remaining gland. I have the opportunity of observing frequently a lady from whom one kidney was removed nearly eight years ago; since that time she has lived an active domestic life, has not followed any special diet, yet she enjoys perfect health, and does not present any evidences of deterioration either in the heart or blood vessels. Clearly, therefore, it is very doubtful whether we are entitled to regard the cardio-vascular changes as the result of an endeavor to eliminate normal urinary excreta.

The difference between the clinical symptoms of obstructive and non-obstructive urinary suppression indicates that in nephritis there is either a failure to destroy some toxin normally present in the urine (possibly from absence of an internal renal secretion), or that some new poison is present in the circulation. All investigations relating to the existence of an internal renal secretion which has the power of destroying toxins have up to the present time been far from conclusive. On the other hand, the progressive character of nephritis, the tendency to relapses even under the most favorable conditions, the multiplicity of exciting causes, such as scarlet fever, alcoholism, gout, etc., all of which frequently produce changes in other tissues without any evidence of the kidneys being affected, suggest the possibility that many of the vascular changes found in Bright's disease, and usually described as being secondary to that lesion, are in reality co-existing diseases produced by the same toxins. We know that gouty patients tend to develop cardio-vascular changes, and that a very large proportion of them are free from nephritis; we know that glandular structures may not only have impaired functional activity leading to altered metabolism, but that their function is sometimes very gravely perverted, as when the gastric mucous membrane has been found to excrete urea, and therefore among all the perplexity and failure that has attended our efforts to account for many of the symptoms and changes associated with nephritis on the ground of retained normal excretion, we should consider whether we may not have begun at the wrong end, and that while some symptoms may be due to defective renal excretion, it is perfectly possible that others, including the nephritis itself, have a common origin in the metabolic processes of the body.

Croptan's experiments (*Med. Jour. Med. Sc.*, Vol. CXX) upon rabbits led him to his conclusions which point to this direction, because he found that frequent injections both of xanthin and hypo-xanthin produced nephritis, and also a high blood pressure; and in one case where the injections were continued twice daily for six months the heart underwent considerable hypertrophy, while the blood vessels showed thickening of the intima, together with small cell infiltration of the intima and adventitia. As these substances are derivatives of proteid metabolism they indicate the possibility that many of the clinical symptoms in nephritis at present attributed to disturbed renal function, and which it has been impossible to explain upon that basis, are in reality conditions due to a common cause. Such a pathology would put the treatment of this variety of myocarditis on the same plane with that due to lithemia, and really that is where the clinician empirically has placed it for many years; but the faint glimmer now seen of a scientific solution of the problem entitles us to hope that in the near future workers in chemical physiology and pathology may furnish us with knowledge that will enable us to cope more successfully with a disease against which our present efforts are of little avail.

The third group of heart cases we decided to consider was that in which the myocardial disturbance seemed to be associated with the existence of a neoplasm in some other part of the body. While there are several conditions that might be discussed under this head, attention will be directed to one only, *i. e.*, fibroid tumors of the uterus. The relationship between these two conditions is not understood, although many theories have been advanced by way of explanation; but what is even more unfortunate is the fact that the relationship is not generally recognized, and cases go on to a fatal termination, when early operation might have restored the patient to perfect health. I should like to read the abstracts of two cases in illustration of the conditions to which reference is made.

Case A—Patient at the age of 25 years, unmarried, began to feel weak, and had attacks of syncope. The pulse cardiac sounds were weak, but otherwise the heart appeared to be normal, it being impossible to detect any change in the area of dullness or in the valvular apparatus. These attacks of weakness would sometimes last for several days, so that the patient was unable to follow her usual vocation, but had to spend her time in bed. Generally a course of arsenic and strychnin built her up so that she could resume her duties, but it would be long before she was again incapacitated. About the same time she began to suffer from painful menstruation, and this became so severe that ultimately an examination was made, which revealed the presence of a small fibroid about the size of a walnut; but as she never suffered from excessive menstruation nor hemorrhage between the periods, no importance was attached to it as bearing upon her extreme cardiac asthenia. After two years the tumor began to grow very rapidly, and caused such pain that the patient decided to have the uterus removed. When I saw her about two months later, and was congratulating her upon her recovery, she said, "Do you know, doctor, my heart has not troubled me since the operation." It is now nearly three years since the fibroids were removed, and the patient enjoys good health. I met her a few days ago, and in response to my question, she replied, "I never know I have a heart."

There are several other cases that we could mention, but the histories are too imperfect to be of value as statistics, and the above will serve for purposes of illustrating, so it is not necessary to rehearse them.

The first question that suggests itself is whether the cardiac symptoms of such cases are reflex-nervous in character, or are due to changes in the myocardium. No one disputes the fact that myomata produce many reflex symptoms, but it is equally true that they are also associated with tissue changes in the myocardium. Looking at the cases from a clinical point of view, the dilatation and persistent weakness during many months are suggestive of myocarditis, but still these might be due to lack of tonicity. Sufficient autopsies, however, have been recorded to establish the nature of the morbid anatomical changes, and the following abstract of a case published by Kessler is an excellent illustration of the point in question. The patient suffered from a large uterine fibroid which was not accompanied by hemorrhage, but on account of its size gave rise to considerable distress. Everything went well until the seventh day after the operation, when the patient, while sitting up in bed, suddenly fell back and died. Post-mortem examination showed that the entire heart was enlarged, the right ventricle was dilated, the left showed hypertrophy in excess of dilatation, and the coronary arteries were healthy. Microscopic examination revealed a myo-fibrosis involving both ventricles and auricles, but most marked in the right ventricle, and consisting of an over-growth of connective tissue between the muscular fibres rather than degenerative changes in the fibres themselves. It differed from senile atrophy in the fact that the coronary arteries and their branches were perfectly free from sclerosis.

Strassmann examined a very large number of patients suffering from fibroids, and in 45% of them he was able to demonstrate changes in the myocardium. It would therefore appear that we are perfectly warranted in accepting as proven the frequent coexistence of uterine fibroids and myocarditis.

(To be concluded.)

POSTERIOR GASTRO-ENTEROSTOMY FOR SIMPLE CONDITIONS OF THE STOMACH.*

By THOS. W. HUNTINGTON, M. D., San Francisco.

THIS contribution is offered as a rather faint echo of the work and teachings of Von Hacker, Czerny, Mikulicz, Kocher, Robson, Moynihan, Mayo and many others who have labored faithfully for a solution of problems involved in this consideration. By these masters their followers have been clothed with authority, and to them I make grateful acknowledgment.

Stomach surgery in the broader sense presents a field of activity in which progress and achievement depend upon two factors:

First—*Early, accurate diagnosis.* Every surgeon in the presence of a patient whose lines betray exhaustion, lowered resistance and enfeebled vitality; or when confronted by lesions, multiple, complex and disheartening, has realized how infinitely greater had been the assurance of success if rational treatment could have been applied at the most opportune moment. In this particular field, personal history of the patient, the symptom complex and laboratory findings fail oftentimes to produce a clinical picture commensurate with the seriousness of existing pathologic lesions. Personal ocular inspection of affected organs is often the more rational, if not the only satisfactory method of investigation; and, as I have said many times, "I am prepared to advise and to make a diagnostic incision whenever symptoms, significant and intractable, suggest the presence of lesions that may be amenable to operative interference."

Second—The future of stomach surgery will depend upon corrective measures which are shown to be reasonably safe; measures which may be executed boldly, with promptness and precision. At this point we are met by a query of great moment and of universal significance. Do we, as surgeons, from the standpoint of mortality and of results, make good to the patient and to his medical attendant our pre-operative assurances? Putting it more concisely, does the artificial visceral arrangement and relation, as contemplated in gastro-enterostomy, meet the requirements for which it was devised? Are we warranted in the assumption that the operation is uniformly safe, and that the digestive function under the new régime will be maintained permanently, without discomfort to the patient?

This record of personal experience, together with a careful analysis of twelve posterior gastro-jejunosomies, will aid somewhat in our efforts to meet some of the foregoing requirements. At least we shall throw a little light upon many of the perplexing problems that arise in the conduct of these cases. If results in this series, so far as at present determinable, are not comparable with the achievements of men of broader experience, it must be remembered that "the winds and waves are always on the side of the ablest navigators."

In the literature of every language are to be found many exhaustive treatises setting forth the etiology, pathology and symptomatology of benign stomach lesions, and I have studiously eliminated from this report any formal review of what has been stereotyped, and with which the average physician is supposedly familiar. These observations and the work herein described are based upon a few generally accepted facts which may be briefly outlined.

First—Surgical intervention for simple lesions of the stomach is undertaken in fully 95% of cases for the relief of gastric or duodenal ulcer, acute hemorrhagic, perforative or chronic; or for the correction of one or more of the common sequelæ of gastric ulcer, pyloric obstruction, gastric dilatation or hour-glass contracture.

Second—The keynote to the surgical treatment of these various exigencies, except perforative ulcer, finds expression in a single word. Drainage is the procedure of almost universal acceptance, and free drainage through the most dependent portion of the posterior wall of the stomach into the upper jejunum seems to have the endorsement of the majority of surgeons. This plan has been carried out without exception in this series; hence I have omitted discussion of the merits and demerits of the claims made for attack directly upon the pylorus, as in the Heinecke-Mikulicz or Finney operations.

Third—Bleeding ulcer of the stomach or duodenum, except in a few exaggerated cases, need not be looked for nor excised, repair being effected by diverting the stomach contents from its usual channel.

Fourth—Aside from surgical shock and sepsis after gastro-enterostomy, early persistent vomiting constitutes the most serious obstacle to uninterrupted recovery. This manifestation strongly suggests the occurrence of the so-called "vicious circle," with all its wretched consequences. The condition is brought about by the entrance of stomach contents into the proximal portion of the jejunum, thereby establishing a reverse current through the duodenum and pylorus. In transit the volume of this material is augmented and its character altered by the addition of biliary and pancreatic fluids. The presence of this combination is resented by the stomach, and obstinate vomiting is the result.

Method of Anastomosis.—Personally I have never been impressed with the great value of the McGraw elastic ligature, the Murphy button or of any other of the so-called mechanical contrivances for bowel anastomosis, and for this particular purpose there are the very best of reasons why simple suture is superior in every respect. The objection to the McGraw ligature lies in the fact that the establishment of the anastomotic opening is necessarily delayed for several days after the initial procedure. The presence of a metallic body of the dimensions contemplated by the button certainly adds something to the inherent risk, and as has been wisely said by Moynihan, will occasion now and then a fatality which otherwise need not have been. Again, the highest probability of success after gastro-enterostomy depends upon immediate and thorough drainage of the stomach. This cannot be effected with a high degree of assurance through the narrow lumen of a button. Hence it is possible that a considerable amount of bloody mucus may be retained within the stomach for an indefinite period, seriously menacing the comfort, and possibly the life, of the patient. Another objection to the use of the button lies in the fact that the dimensions of the anastomotic opening are limited and narrow as compared with the possibilities of the simple suture. The claim of those who advocate the button, that it can be applied far more quickly than the simple suture, seems not to have any foundation in fact.

The abdominal incision may be made either in or a little to the left of the median line. The stomach and pylorus should be carefully inspected, to determine dimensions, degree of dilatation and existence of adhesions. Great care should be exercised in locating the exact point of anastomosis. The point of election is in the tundus on the posterior wall and remote from the pylorus near the greater curvature. If we overlook the fact that the pylorus lies close to the median line, the tendency will be to make the anastomotic opening much nearer the pylorus than is intended. The transverse colon and omentum are drawn upward and the transverse meso-colon is divided at a point free from large blood vessels. This incision should be tolerably liberal. Through this opening the posterior stomach wall, at the point above noted, is grasped with a pair of forceps and

*Read at the Thirty-first Annual Meeting of the Oregon State Medical Association, Portland, August, 1904.

drawn through the slit in the meso-colon until it forms a cone of liberal dimensions. The base of this cone is then sutured with silk to the pillars of the meso-colon. The base of the cone is clasped between the blades of a Doyen clamp. The jejunum is picked up as it emerges below Treitz ligament at the root of the transverse colon to the left of the spine. The proximal end of the jejunum is thus definitely located, and a portion eight to ten inches below Treitz ligament is selected for anastomosis. This is isolated by engaging both distal and proximal limbs in a second clamp. The jejunum is then placed in contact with the isolated portion of the stomach and attached to the stomach wall by a row of continuous silk Lembert sutures about three inches in length. Both ends of this suture are left free and held by clamps. The serosa and muscular coats of the stomach and jejunum are divided by parallel incisions three-sixteenths of an inch on either side of the suture line. The underlying mucous membrane is uncovered by dissecting off the divided layers until the lips of the incision are nearly half an inch apart. The exposed mucous membrane is removed, leaving the exposed borders free from redundant mucous tissue. A second row of continuous through-and-through silk sutures is begun at one end of the incision joining the cut edges of stomach and jejunum. The distal end of this suture is also left free and clamped. It is carried entirely around incision, joining first the edges adjacent to the original suture line and finally is made to unite the opposite edges and complete the junction of the two viscera. The two ends of this suture are then carefully tied and cut short. The first suture, still armed, is then picked up and made to unite the visceral walls parallel to the anastomosis, and the two ends are finally tied and cut short. In the incision of the visceral walls, blood vessels of considerable size will now and then be divided, and should be carefully ligated with silk. It is a mistake to depend upon their constriction by compression by the anastomosing suture.

Two further steps for the avoidance of the vicious circle are now regarded as essential in the completion of this operation. First, the making of a second anastomosis between the two limbs of the jejunum at a point about two and a half inches below the stomach anastomosis. This is accomplished by repeating the procedure above described. The second contemplates constriction and partial closure of the proximal segment of the jejunum lying between the two anastomoses. This is accomplished by two overlying rows of mattress Lembert sutures so adjusted as to infold and occlude this part of the bowel. By this means reflux of the stomach contents into the proximal segment of the jejunum is made impossible. The perfect reliance which is placed upon the gastro-anastomosis is clearly evidenced by the fact that within six hours after operation, in the presence of vomiting, I have frequently irrigated the stomach with the requisite amount of water to insure perfect cleansing.

The advantages of posterior over anterior gastro-enterostomy are clearly apparent in a great majority of cases, and for the following reasons: The posterior method leaves the jejunum and stomach in more nearly the normal relation. Anterior gastro-enterostomy places the jejunum in such position as to drag the anterior stomach wall downward, causing pressure upon the transverse colon and frequently a sense of tugging at the point of anastomosis. It has been noted also that extensive adhesions between the omentum and the viscera are more liable to follow this procedure.

Clinical Histories: Case 1.—Mrs. F. A. W. Age 42. Maximum weight, 118 pounds. Present weight, 96½ pounds. Has been an invalid for five years, suffering from uterine myoma and gastric disturbances. During this period has had several gastric hemorrhages, manifest in vomitus and stools. Gradually became emaciated, lost strength and drifted into chronic invalidism. Underwent hysterectomy June 20th, 1903, from which she made a quick recovery without relief to stomach symptoms. From

this time on there was anorexia, frequent vomiting, pain and tenderness at epigastrium, evidences of pyloric insufficiency, gastric dilatation. Four months after hysterectomy she returned and underwent posterior gastro-enterostomy, from which she made a quick and uninterrupted recovery. Subsequent history: Appetite invariably good, has resumed activities, has partially regained normal weight, and is perfectly satisfied with result of operation.

Case 2.—Mrs. B. Had definite history of gastric ulcer eighteen years ago, and has always been partially invalid since that time. In 1898 underwent hysterectomy for uterine fibroids by another surgeon. Her appendix was removed in 1900 by myself. For three years prior to 1903 suffered intensely from dilatation of the stomach, fermentation, pyloric insufficiency. There was distinct pain at epigastrium, marked anorexia. This patient can be classified as belonging to the neurotic type, and suffered from general neurasthenia. Prior to operation she was bedridden; weight 76 pounds; case regarded as hopeless by two able medical authorities. Without predetermining any very definite opinion as to its value, I offered gastro-enterostomy as a possible relief. This was done November 10th, 1903. Recovery from operation was slow; gastric circulation was resumed only after a period of two or three weeks. Later, under the care of a competent medical adviser, she improved somewhat. Six months after the operation she returned to her home. Present condition: Is now able to be about. Lives a fairly comfortable life; has resumed her activities in a restricted way; walks a little, and drives occasionally. She is about ten pounds heavier than at time of operation. While the result cannot be regarded as satisfactory, I believe her life has been prolonged and her comfort markedly increased thereby.

Case 3.—Mrs. A. M. J. Age 35. Gastric symptoms for over two years, acute epigastric pain, evidences of pyloric obstruction, frequent vomiting, blood in vomitus and stools frequently. Hemorrhage, sometimes profuse and frequently attended with severe pain and chill. Condition became more and more pronounced. Occasionally was jaundiced, and attention had been called to possible gall bladder disease. In past six months has lost 49 pounds. Present weight, 135 pounds. Gastro-enterostomy was done January 1st, 1904, and simultaneously cholecystectomy for an infected gall bladder containing a single large stone. Recovery was prompt and uninterrupted. Present condition as reported in person: Resumed duties as a business woman shortly after operation, and with one or two slight upsets her condition has been perfectly satisfactory. Eats with relish for the first time in several years. Present weight 163 pounds.

Case 4.—Miss F. S. Age 29 years. Born in Sweden. Cook. About six years ago suffered from pronounced gastric disturbance, pain, occasional vomiting, which has increased in frequency. Has been under the care of many physicians, who have in turn succeeded in securing latency of trouble. Frequent relapses have occurred. There was occasional hemorrhage from the stomach, and tarry stools. For the past year has been able to work but a small portion of time. She had become anemic, and evidences of pyloric obstruction were manifest. Operation was done February 1, 1904. For the first week there was persistent biliary vomiting, and for two or three weeks I was rendered anxious by apparent delay in establishment of the gastro-intestinal circulation. From this time on there was marked improvement. She resumed work at the end of three months. Present condition: Appetite ravenous, digestion excellent, is gaining weight rapidly, and is perfectly satisfied.

Case 5.—Mr. S. S. Age 42. This patient was watched by physicians in a distant city for a short time previous to operation. There was a long history of faulty stomach conditions. Recurrent attacks of gastric pain, gradual loss of weight and strength. Two days before operation, was reported to have had a severe gastric hemorrhage and a second on the following day. I saw him on the morning of the operation, February 13th, 1904. His condition was very grave. He was weak, pulse feeble and his condition well nigh hopeless. Without further investigation, posterior gastro-enterostomy was done. Adjoining the stomach opening there was a large cicatrix, indicating former ulceration. The subsequent history of the patient was unfortunate. He vomited occasionally, never manifested desire for food, and died on the sixteenth day.

Case 6.—Mr. L. M. Age 56. Definite history of gastric ulcer for seven years. For five years classical evidence of gastric hemorrhages, pyloric obstruction and dilatation. Is emaciated; lips and tip of nose cyanotic; tongue coated; breath foul; refuses food; general condition desperate. Posterior gastro-enterostomy on May 17, 1904. Recovery was rapid and uninterrupted. Stomach feeding resumed on the third day. Left hospital at the end of four weeks in fine condition. Lost trace of patient, and have no later report.*

*Note.—This patient disappeared after leaving the Hospital and could not be located for several months. He reappeared, however, on the 15th of September, 1904, with every evidence of recurrent obstruction at the point of anastomosis. The second operation revealed the cause, which existed in the stomach having receded through the transverse meso-colon, drawing with it both limbs of the jejunum. The pillars of the meso-colon had contracted as in constriction. Since that time he has vomited rarely and is coming on satisfactorily.

Case 7.—Mrs. W. A. L. M. Age 50. For past five years has complained of gastric disturbances, fermentation, vomiting, pyloric insufficiency, exaggerated dilatation, pain at epigastrium, and classical evidences of frequent hemorrhages. There is extreme emaciation and loss of strength. Is bedridden and hopeless. Operation May 19, 1904. Pylorus and duodenum greatly thickened and fixed by adhesions. Recovery was prompt without interruption, and she left the hospital on the seventeenth day in an ideal condition. At present her appetite is ravenous; says she cannot get enough to eat. Has gained 27½ pounds.

Case 8.—Mr. L. P. Age 34. Previous history indefinite, owing to inability to speak English. For some time has been under care of Dr. Kerr at City and County Hospital, by whom he was referred to my service. Symptoms point definitely to old gastric ulcer. Epigastric pain, vomiting, pyloric obstruction, dilatation, gastric hemorrhages. Operation June 30, 1904. Immediately after operation gastro-intestinal circulation was re-established. At the same time there was a development of acute tuberculosis involving both lungs, from which the patient died at the end of one month.

Case 9.—Miss E. H. Age 25. A nurse. For two and a half years has suffered from typical recurrent attacks of appendicitis associated with the usual symptoms of gastric ulcer; pain, pyloric obstruction, dilatation, occasional gastric hemorrhages, total loss of appetite, inability to take other than liquid food, frequent vomiting, fermentation. Has abandoned work, and is completely invalid. Operation July 1, 1904. Appendectomy and posterior gastro-enterostomy. Immediately succeeding operation there was an advent of vicious circle. Biliary vomiting of the most pernicious type. Patient nourished by rectal alimentation for twenty days. Then secondary enterostomy for relief of vicious circle, followed by prompt recovery, immediate re-establishment of gastro-intestinal circulation, resumption of appetite. Present condition: Patient eats ravenously; in past two weeks has gained six pounds, and from the psychic standpoint has undergone a complete transformation. Eats miscellaneous diet without restriction.

Case 10.—Mrs. X. Age 40. Is a rather stout person. Was well until about two years ago, when she suffered from distressing symptoms located at epigastrium. There was pain, vomiting, slight jaundice, gastric fermentation and loss of appetite. A year later, after an interval of comparative comfort, there was a recurrence of the trouble, with intensified symptoms, also marked prostration. Pain and vomiting more persistent. Since that time has had recurrences every five or six weeks. Has frequently vomited coffee-ground material, associated with tarry stools. About three months ago, during one of her attacks, became noticeably jaundiced, icterus disappearing with subsidence of pain. Since that time there has been pain after indiscretions in diet, always attended with vomiting. For the past three weeks has been constantly in bed, and icterus, pain, nausea, vomiting and constipation have been constant symptoms. Has vomited blood several times. She is greatly prostrated. Complaints of extreme tenderness on pressure over gall bladder and pylorus. Stomach greatly dilated. Has retained nothing but liquid food for many weeks, and liquid food frequently provokes vomiting. Diagnosis: Gall stones, associated with chronic hemorrhagic gastric ulcers and pyloric stenosis. Operation August 5, 1904. Gall bladder was opened and several stones were removed. Drainage provided for. Posterior gastro-enterostomy by the usual method was effected. After operation, did not suffer from sepsis, but developed the vicious circle immediately. At the end of ten days, her condition being alarming, entero-enterostomy was done for relief of vicious circle. Patient died from shock five hours later.

Case 11.—Mrs. S. I. Age 26. For the past four years has suffered from recurrent appendicitis and floating right kidney and gastric symptoms. There has been constant sense of distress in stomach, associated with loss of appetite, gradual emaciation, fermentation, pain at epigastrium and general neurasthenia. Three months ago I removed the appendix and sutured right kidney. Recovery from these operations was prompt, but epigastric symptoms persisted. Entire loss of appetite; could not digest solid food, and ingested but little liquid food. Condition became absolutely miserable. On the 5th of August, 1904, posterior gastro-enterostomy was done. Immediately after operation there was advent of vicious circle, which persisted without interruption for fourteen days. On August 19th entero-enterostomy was done for relief of vicious circle. Following second operation there was immediate and complete cessation of vomiting. Gastro-intestinal circulation rapidly established. September 15, 1904.—At the present time her appetite is ravenous. She eats three full meals of solid food a day. During past week has gained two pounds. Is able to sit up the entire day, and expresses herself as perfectly comfortable.

Case 12.—Mr. P. R. Age 45. Always well until twelve years ago, when he suffered from persistent epigastric pain, frequent vomiting, gastric hemorrhage. Since that time has had occasional recurrences. Two years ago had a violent seizure, and was very ill. Symptoms as before. Present history: Pronounced anorexia; has eaten no solid food for several months. Gastric motility almost absent. Liquid food passes pylorus very slowly. Marked dilatation. Great tenderness at epigastrium; vomits frequently. Operation August 16, 1904. Simultaneous gastro-intestinal

anastomosis and enterostomy. Rapid recovery from operation; immediate re-establishment of gastro-intestinal circulation. No vomiting; resumption of appetite; ingests semi-solid food liberally, and at the present time his condition is eminently satisfactory. The degree of comfort succeeding operation in this case fully justified the added procedure of entero-enterostomy. September 15, 1904.—Gained three and a half pounds in the last week. Sits up daily. Appetite ravenous. Eats solid food without discomfort. Entire aspect of patient has changed, and he is perfectly satisfied with result.

Deaths.—Of the twelve cases, three patients died under the following circumstances: Case 5 lived fifteen days, suffering from occasional vomiting, distressing cough and hectic. Autopsy showed a large pulmonary cavity of long standing. The anastomosis was anatomically perfect, but the anastomotic opening was located much nearer to the pylorus than was contemplated, and the stomach circulation was not maintained with a high degree of efficiency. Despite the pulmonary involvement, it is to be said that this patient's life could probably have been prolonged had the procedure been accomplished in accordance with the usual requirements.

Case 8—Gastric circulation was re-established promptly. About ten days later he developed evidences of acute double pulmonary tuberculosis, from which he gradually sank, and died August 19th, nearly two months after operation. Autopsy: Both lungs involved in tubercular process, and contained large cavities. Anastomosis anatomically sound. Anastomotic opening fairly well located but nearer the pylorus than had been contemplated. Gastric circulation had been well maintained, but violent coughing was attended by occasional vomiting.

Case 10—This patient underwent gastro-enterostomy and cholecystectomy simultaneously. The patient rallied promptly, and, despite the gall bladder interference, never suffered from sepsis. There was, however, immediate establishment of vicious circle, accompanied by incessant biliary vomiting, for the following ten days. At that time enterostomy was attempted as an escape from conditions present. During this operation the peritoneal cavity was found to be free from sepsis, the previous anastomosis was anatomically perfect, and the second operation was quickly completed. The patient, however, never rallied, and died six hours later from shock. The lesson drawn from this case may be stated as follows: The first attempt should have been for a combined gastro and entero-enterostomy. Of the nine surviving patients, the results in eight, so far as at the present time determinable, are satisfactory. The present condition of the remaining patient is one of marked improvement, although the result is not altogether satisfactory.

Vicious Circle.—Persistent vomiting has followed five operations in this series. In two instances there was spontaneous recovery after a period of three and four weeks respectively. In three instances there was a resort to secondary entero-anastomosis after an interval of nineteen, ten and fourteen days. Two recovered promptly, and one died. In the last case of the series a double simultaneous anastomosis prevented completely the advent of the vicious circle. From this it is clearly evident that radical measures for the prevention of this complication should be instituted during the initial undertaking.

Time Occupied in Anastomosis.—Sixteen gastro and entero-anastomoses were done on twelve patients. A statement as to time occupied in each case is a matter of some interest. The gastro-anastomoses were accomplished in ten cases, as follows: 17, 21, 16, 14, 14, 18, 12, 18, 19 and 18 minutes. The four entero-anastomoses were completed in 11, 12, 11 and 14 minutes. The average time for the first class was 16.8 minutes. The average time for the second class was 12 minutes. With increased experience and perfected technic I believe that the average time can be reduced to fifteen and ten minutes respectively.

COMMUNICATIONS.

WHAT OUR JOURNAL IS DOING. SOME TRUTH.

No man more fully realized the enormity of the task undertaken when the State Society decided to publish an ethical journal and endorsed the policy of truth telling established by the Publication Committee, than did the editor of this JOURNAL. He knew and he knows the rottenness pervading the business of exploiting the medical profession by many pharmaceutical manufacturers and manufacturers of nostrums. But it seemed as though a little truth, told unflinchingly, might do some good. For at least five years quiet, personal, effort had been made by others to induce the *Journal A. M. A.* to become decent, but without result; no one would speak out, and little could be done when all other medical journals in the land could point to the official organ of the physicians themselves as excuse for advertising absolutely rotten, vile and worthless stuff, nostrums, etc., ad nauseam. The editor expected to get plenty of abuse, and he has not been disappointed; some of it has approached pretty close to personal slander. Fortunately for him, every step taken, every matter of policy, every decision connected with the advertising question, has been gone over by the whole Publication Committee. That committee has had many meetings and nearly all of them have been attended by every member. So far as the financial side is concerned, every transaction has been carefully inspected by the auditing committee of the Trustees and they know just what is going on and just what is being done. It would therefore be an easy matter to protect the editor from slander at home; from the attacks of those abroad he does not care for protection, for he regards most of them as highly complimentary. All this is appropos of some letters recently received from some friends in various parts of the country. Two of these letters are of particular interest.

The first one stated that the men connected with the advertising department of the *Journal A. M. A.* were highly wroth with us for stirring up the advertising question, and that the manager of that department had been "knocking" our JOURNAL as hard as he could, impugning our motives and alleging personal reasons for our attitude. This, we must confess, we find it hard to believe; but it came pretty straight.

The second is of more general interest and therefore the editor bespeaks your careful reading of it. Some of it is decidedly too personal to quote, but most of it follows:

Dear Dr. Jones: In reply to your letter I would say that to repeat all the comments and criticisms would be too long a story; I will tell you more of them when I see you again. Some say the editorials are not dignified enough; that you should not discuss the advertising question; that you are being imposed upon (!); that your JOURNAL is operating for the benefit of a few good houses and the German chemical manufacturers. Other comments are too personal and abusive to be written. There are a number of concerns that would give almost anything to see your JOURNAL go to the wall. I learned of one house that was wildly indignant because, they said, the *Journal A. M. A.* had required them to give a formula on account of what you had published. It is certainly remarkable the commotion your little JOURNAL is making. You have arrayed against you the manufacturers of secret proprietary stuff, editors of personally or privately owned journals, advertising agencies and even some of the reputable houses. Nevertheless, it seems to me that they will have to come your way in time, especially if other state journals will adopt a similar policy. Of these, only three seem to be clean; Colorado, Pennsylvania and New Jersey. How medical societies will permit such atrocious advertisements as are appearing in the

Missouri and the *New York Association Journals*, I cannot understand; they are worse than the *Journal A. M. A.* ever was. I am very glad to say that you have a few very warm and enthusiastic friends in the business world, who decidedly approve the policy and course of your JOURNAL and appreciate the work your Society is doing. I learned through a common acquaintance that the O'Gorman Advertising Agency is clipping the articles in which you attack or mention unfavorably different houses, and sending the clippings to these concerns, trying to influence them against your JOURNAL. I learned, the other day, from one of your advertisers who is most enthusiastic in approval of the JOURNAL that a certain house in this city had offered to pay for his advertising in three other journals—any three he wanted—if he would withdraw his advertisement from yours. He assured me that he would not. If you can keep up the fight for another year and force the Trustees of the A. M. A. to adopt a policy of ethical decency in the conduct of the *Association Journal*, your fight, I think, will be won. Personally I wish you every possible success. Cordially yours, A. B.

"OAKLAND AND VACCINATION."

To the Editor of the STATE JOURNAL:—Referring to your editorial, "Oakland and Vaccination," Vol. II, No. 11, p. 326, I beg to say that instead of Oakland, some one in San Francisco is slightly behind the times. Oakland has been enforcing the Compulsory Vaccination Law since June, 1904. A free vaccination day has been in vogue here still longer. No case of smallpox has occurred in Oakland since July 12th, 1904. As to the anti-vaccination societies, they have not been heard from for some time, and we believe they die from inanition *if not irritated*. The enclosed 'Bulletin' of the Health Department may be of value. You may receive it regularly if you desire, and possibly thereby avoid unfortunate errors regarding Oakland. Our health is excellent, and we want everybody to know it, so please insert, and oblige.

Cordially yours,

EDWARD VON ADELUNG.

Health Officer, Oakland, California.

(About the same time—almost in the same mail with the above letter—came a circular from a "Mrs. E. C. Campbell, Secretary," enclosing two leaflets entitled, respectively, "The Liberator," and "Legalized Child Murder." These documents are put out by an anti-vaccination society in Berkeley (home of learning and enlightenment) and the latter gives a list of doctors who indorse the anti-vaccination movement. The list is as follows: Dr. W. Allen, President of Board of Education, Berkeley; Dr. Farrar, Virginia street, Berkeley; Dr. Hitt, Adeline street, South Berkeley; Dr. J. N. Obery, Ellis street near Harmon, South Berkeley; Dr. W. H. Loomis, near Twenty-third on Twenty-ninth streets; East Oakland; Dr. Fahrman, Golden Gate; W. N. Griswold, M. D., 106 Eddy street, San Francisco; C. J. Holmgren, M. D., 1050 Golden Gate Avenue, San Francisco; Dr. A. D. Fouchy, 834 Santa Clara Avenue, Alameda; W. E. Ledvard, M. D., box 113, Alameda; R. Cauch, M. D., Carpenteria, Cal.; Blanche L. Sanborn, M. D., 1786 Sutter street, San Francisco; Dr. Nanie Clark, 722 West Seventh street, Los Angeles; Arthur C. Green, M. D., Broadway, Los Angeles; Matthew T. Wilson, M. D., 1666 Fell street, San Francisco; Edmund Beckwith, M. D., Petaluma; W. E. Ahernbaugh, M. D., Napa; Mrs. Dr. Moore, Berkeley; J. T. Tapley, Marysville, Yuba county; J. E. Huffman, M. D., 546 Sutter street, San Francisco; H. M. Bishop, M. D., 2627 Hoover street, Los Angeles; George Pyburn, M. D., 1011 H street, Sacramento; W. P. Chamberlain, M. D., Santa Cruz; Albert Hiller, M. D., 1019 Sutter street, San Francisco; W. P. Burke, M. D., Alauric, Sonoma county; and Dr. Franklin of Oakland, who brings the news

that Oregon has repealed the Compulsory Vaccination Law.

Of these, eight seem to have no license, or at least no record can be found of that fact; 16 are homeopaths, and 2 are eclectics. It certainly is a great surprise to see the names of so many homeopaths in the list, for one would imagine that vaccination was right in line with "similia similibus." The "antis" are making all the capital they can out of the death of one child from tetanus, some time ago, probably due to uncleanness. The parents of this child had probably not read the advice of the San Francisco Board of Health, and *acquired the habit* of cleanliness, or cleanness.—(Ed.)

THE DRUGGIST QUESTION—ANOTHER VIEW.

To the Editor of the STATE JOURNAL:—In the November number of the JOURNAL, a communication from Dr. Musgrove on "The Druggist Question," only partially reaches the truth, from my standpoint. While in some sections druggists may be under the influence of the nostrum manufacturers and endeavor to devote most of their attention to that portion of the drug business, is his brother druggist, in some other section, trying to do a legitimate prescription business, but under the control of the nostrum-prescribing physician, any better off? I have seen many a physician's fee go astray by his prescribing articles like "Gude's pepto-mangan," "listerine," "Fellow's syrup," etc., to prescription-reading patients who afterward bought these articles in the original package and advise families or friends to use them as "Dr. So and So" had prescribed them under similar conditions. I have many a recipe on file that, calling for "A's this" and "B's that," mixed, looks like a ready-made suit badly altered to fit the customer, and probably fits the patient's case about as well as such a suit would fit his body. Let the physician first rid himself of the nostrum-prescribing habit, and the druggist who wants to do a legitimate business will only too gladly follow his lead and return to the simple drugs and pharmacopeal preparations.

DAVID H. FLETCHER.

(The JOURNAL has over and over again called attention to the harm which doctors do to their patients and to themselves when they prescribe this "ready-to-take" medicine. Why they continue to do it, the good kind Lord alone knows! It has been alleged that they do it because they do not know enough to write a prescription, and possibly there is a good bit of truth in that. At any rate, they do it and they themselves have had more to do with debauching the profession of pharmacy than any other factor. The physician has been too credulous; has had too little thought for the commercial interests back of manufacturing; has regarded all manufacturers too much in the light of philanthropists; has had too little thought for his own good. Probably, too, he has had far too little instruction in legitimate materia medica.)

Patent Medicine Advertising.

We observe that the *Journal of the American Medical Association*, is beginning to print the formulæ of proprietary remedies along with the advertisement. While this might strike some as a case of an eleventh hour repentance, it is to us a gratifying sign of progress in the right direction.

We do not hesitate to assume that hereafter no contract can be made with *The Journal of the American Medical Association* to advertise a proprietary remedy in which it shall not be stipulated that the formulæ shall be a portion of the advertisement.

As a corollary to this position, it will follow that no reputable medical journal will in future venture to make a contract to advertise a proprietary remedy unless the formulæ shall be a part of the advertisement.—*Journal of the Medical Society of New Jersey.*

PRECOCIOUS MENSTRUATION.

I was recently called to see a child who had swallowed a baby pin and was at once struck with the unusual development of the child. It was two years and four months of age, but had the body and limbs of a much older child.

The child was born May 13, 1902, and the mother noticed soon after its birth that the external genitals were enlarged. She asked her attendant about it and was told that it was a little swelling, which would soon disappear. The child was fretful and cried practically all the time when awake, till it was six months old. Its sleep had never been good, and it was always restless. When six months old the mother noticed that the child was bleeding as if menstruating. The flow became very free and the child sank into its first peaceful sleep. The flow continued for 3 or 4 days, just as mother, but she did not consult her physician. After 28 days the flow again made its appearance and continued for the same time and in the same quantity. Since then the child has menstruated every 23 days regularly for the same number of days and showing the same quantity, soiling 2 napkins a day, except that on two occasions there was a little delay, corrected by warm drinks and foot baths. The child is of normal height and face for one of her age. The breasts are well developed and of good size, as are the nipples. The trunk and legs show the development of a much older child. The hips are broad and rounded, and the calves well developed. The mons veneris is large and covered with a good growth of long, silky hair, which is light in color but beginning to change to a darker shade. The labia are large and very prominent.

So far as the literature in private and public libraries shows, there is but one recorded case of menstruation before the age of one year, and that showed the establishment of the menses just prior to that age. This case is unique in that the menses were established at apparently the earliest age on record.—*Ford in Journal of the American Medical Association.*

WATCH YOUR LEGISLATORS!

The following list, arranged, for convenience, by counties, has been compiled from the newspaper reports of the result of the last election. The letter (s) following a name indicates a State Senator, and the letter (a) an Assemblyman. Names printed in black face type are those of gentlemen who have replied to the letters sent them by your secretary and the secretary of the Homeopathic State Society, and they have indicated their intention to leave the medical law alone.

It is now up to each county to watch its legislators and see that, in the coming session, these gentlemen do no tampering with two extremely valuable laws. First, the medical law; second, the law requiring vaccination of school children.

Members should study this list carefully, pick out the names of men they know, and write to them at once expressing their views in regard to the two laws mentioned. Remember that we are not merely a few weak individuals, but that the two societies now represent over 2,000 physicians of California.

It is part of every doctor's life work to shield and guard the public welfare in all things pertaining to health. Here is some work for you to do right along that line. Do not neglect it. Both of these laws are vitally important for the public good; they must not be tampered with.

Alameda—Mattos (s), Simpson (s), G. R. Lukens (s), Strawbridge (a), J. C. Bates, (a), Walsh (a), J. J. Burke (a), Bliss (a), Espey (a), W. H. Waste (a).

Alpine—McKenney (a).

Amador—McKenney (a).

Butte—Gates (a).

Calaveras—McKenney (a).

Colusa—Weyand (a).
 Contra Costa—Belshaw (s), Ells (a).
 Del Norte—Selvage (s), J. L. Coyle (a).
 El Dorado—Duryea (a).
 Fresno—Chandler (a), A. M. Drew (a).
 Glenn—Weyand (a).
 Humboldt—Rolley (a), Bransteter (a), Selvage (s).
 Inyo—Leeke (s), Lumley (a).
 Kern—Dorsey (a).
 Kings—Pryor (a).
 Lake—Weyand (a).
 Lassen—Creighton (a).
 Los Angeles—J. A. Goodrich (a), W. A. Johnston (a), Thompson (a), W. H. Wickersham (a), Stanton (a), H. S. McCartney (a), Transue (a), Houser (a), J. H. Krumminger (a), Broughton (s), Carter (s).
 Madera—Yokum (a).
 Marin—Belshaw (s), Olmstead (a).
 Mariposa—Jones (a).
 Mendocino—Held (a).
 Merced—Yokum (a).
 Modoc—Creighton (a).
 Mono—McKenney (a).
 Monterey—Lynch (s), Cooper (a).
 Napa—Rush (s), King (a).
 Nevada—Irish (s), Whitney (a).
 Orange—Amerige (a), Anderson (s).
 Placer—Irish (s), F. A. Duryea (a).
 Plumas—Irish (s), Gans (a).
 Riverside—Anderson (s), M. Estudillo (a).
 Sacramento—Busick (a), O'Brien (a), Lynch (a), J. A. McKee (s).
 San Benito—Lynch (s), Slaven (a).
 San Bernardino—Leeke (s), Prescott (a).
 San Diego—Barnes (a), Johnson (a).
 San Francisco—F. A. Markey (s), R. T. Welch (s), E. I. Wolfe (s), G. B. Keane (s), P. T. Haskins (s), J. H. Nelson (s), W. J. Windham (a), J. A. Cullen (a), F. McNamara (a), J. Lucey (a), P. J. Boyle (a), F. J. Meincke (a), F. V. Severance (a), E. F. Treadwell (a), E. E. Pfaeffe (a), F. C. Jones (a), H. C. Beckett (a), T. E. Atkinson (a), G. Hartman (a), N. C. Coghlan (a), G. A. McGowan (a), M. Anthony (a), M. Vogel (a), L. Strohl (a).
 San Joaquin—Beardslee (a), Moore (a), Muentner (s).
 San Luis Obispo—Lynch (s), John (a).
 San Mateo—Rambo (s), Jury (a).
 Santa Barbara—Greenwell (s), Pyle (a).
 Santa Clara—Arnerich (a), Jarvis (a), Micheltree (a).
 Santa Cruz—Rambo (s), Cleveland (a).
 Shasta—Creighton (a).
 Sierra—Irish (s), Gans (a).
 Siskiyou—J. L. Coyle (a).
 Solano—Rush (s), F. R. Devlin (a).
 Sonoma—Cronwell (a), Tripp (a).
 Stanislaus—Yokum (a).
 Sutter—Manwell (a).
 Tehama—Selvage (s), Gans (a).
 Tulare—Lumley (a).
 Tuolumne—Jones (a).
 Trinity—Selvage (s), J. L. Coyle (a).
 Ventura—Perkins (a), Greenwell (s).
 Yolo—Hawkins (a).
 Yuba—Manwell (a).

"By excreta is meant that which is thrown off by the body of man and animals, and is therefore the original source of infection." (At last we have found it!) "These develop in the air, in the soil, in clothing, articles of furniture, in fact all products of earthy material." (One is a bit in doubt as to whether it is here meant that "man and animals" so develop, or if this is the process of development of infection.)—**Health Hints for the Household; S. F. Board of Health.**

PERSONALS AND REGISTER CHANGES.

Those members who desire to keep their Registers corrected up to date should check this list carefully. In the following personals will be found all the official changes (in California) from the Register information as published, to the 15th of November. Hereafter each issue of the JOURNAL will contain the changes received from the 15th to the 15th.

Dr. J. P. Hull, Lodi, has joined the San Joaquin County Society.

Dr. F. H. Shank, Susanville, has joined the Shasta County Society.

The Scobie Memorial Sanitarium was opened on Tuesday, November 8th.

Dr. Eliza F. Petrie, Santa Monica, is we are advised by the postoffice, dead.

Dr. W. Lester Wilson, for twelve years located at Milpitas, has moved to San Mateo.

Dr. Ira D. Ladd, Stockton, has been elected a member of the San Joaquin County Society.

Dr. C. L. Case, Ramona, has been elected a member of the San Diego County Medical Society.

Dr. W. W. Beckett, Los Angeles, was recalled from his Eastern trip by the illness of his son.

Dr. Walter S. Thorne left for New York on October 28th, to be gone six weeks or two months.

Dr. J. Henry Barbat has returned to San Francisco after an extended visit to the Eastern hospitals.

Dr. Dalton S. McCarthy, Los Angeles, is a member of the Society; the name should be in black-face type.

Dr. F. M. Casal, an old and respected member of the Society, died at his home in Santa Barbara, November 6, 1904.

Dr. Plato M. White, of Los Angeles, committed suicide November 10, 1904. No reason for his doing so was given in the press dispatch.

Dr. A. F. Maine, of Redwood City, has returned from New York, where he has been doing post-graduate work in the New York Polyclinic.

Dr. Howard Morrow has been appointed secretary of the section of Skin Diseases at the Pan-American Congress, vice Dr. Montgomery, resigned.

Dr. Elmer S. Stone, of Napa County, is a member of the Society, though his name, through an unfortunate error, does not appear in black-face type.

The names of Drs. J. E. Frazier and D. A. Kellogg, El Dorado County, (page 84, Register) are printed in black-face type through error; they are not members of the Society.

Dr. Andrew J. Dean, Haywards, died October 26, 1904. The *Journal A. M. A.* is in error in the notice of Dr. Dean's death; he was not a member of the State Society at the time of his death.

Drs. D. K. Dickinson, Geo. K. Abbott, Eleanor C. Seymour, A. P. Wilson, Walter E. Deering, E. O. Hay, and R. B. Durfee have been elected to membership in the Los Angeles County Medical Association.

Dr. George Chismore, who some time ago suffered a fracture of the neck of the femur, is doing very nicely and has been sent out of the city by Dr. Sherman, who has been taking care of Dr. Chismore.

Drs. Wm. Ford Blake, Millicent Cosgrove, James B. Hannah, Arthur D. Hirschfelder, Max E. Magnus and Mary W. Turnbull were elected to membership in the San Francisco County Medical Society on November 8th.

Dr. Wallace I. Terry has returned from an extended trip through the East, where he visited all the principal medical libraries and secured many valuable additions to the library of the San Francisco County Medical Society.

Drs. J. E. Kelsey, C. H. Ingram, W. H. Davies, J. I. Clark, J. W. Gunn, Jr., Louis Jacobs, A. E. Sweet, F. H. Zumwalt, B. Thomas, C. B. Munger, J. S. Meneff, F. Lenhoff-Wyld, and G. E. Ap Lynne are members of the Society and their names should be printed in black-face type.

Drs. H. A. Makinson, Fulton (page 70C, Register); **C. H. Thompson**, Santa Rosa; **Lizzie Lain**, Santa Rosa; **J. G. Pierce**, Sebastopol; and **W. D. T. Ward**, Santa Rosa (Register, given in Humboldt County), have been elected to membership in the Sonoma County Medical Society.

Dr. Wm. Watt Kerr met with a rather serious accident on the 4th of October. His automobile and another met in a head-on collision at the corner of Van Ness and Golden Gate avenues, and Dr. Kerr was thrown violently to the sidewalk. He sprained both ankles and his neck, and had a rather nasty scalp wound, but no bones were broken. He was laid up for some weeks.

Errors in the Register, as follows, should be noted: **Drs. Albert Berger** and **Edith J. Claypole**, page 69, and **Dr. Wm. M. Wimer**, page 70G, have not been given licenses by the Board of Examiners, though it is not improbable that they will receive their certificates before the end of the year. **Dr. Nicolls**, page 70D, should be **W. L. Nuckolls**; he has located at Petaluma. Other changes will be found in the general list of changes of address.

Changes in Register.

The following changes in the sixteenth edition of the Register have been noted up to the 15th of November. Some of them are changes of address and some changes of spelling. In some instances letters addressed as in the Register have been returned by the postoffice, showing the address to be incorrect. The secretary will be very glad to receive notice of further corrections that may be noted.

In this list, to economize space (very precious to us!), only the present, correct address is given. In the case of new names, the school, year and date of (C) are given.

Members.

Abbott, G. K., Burbank, Los Angeles County.
Ellis, J. A., 356 Hyde st., San Francisco.
Hart, M. E., French Hospital, San Francisco.
Makinson, H. A., Fulton, Sonoma County.
Seymour, E. C., 307 S. Broadway, Los Angeles.
Thomas, Benj., Crocker Bldg., San Francisco.
Cole, C. C., 1169 Broadway, Oakland.
Kane, J. M., Bacon Blk., Oakland.
Mackay, E. S., Mac Kay, 2250 Telegraph ave., Berkeley.
Orr, Jane, 1169 Broadway, Oakland.
Southerland, H., 517 Central Bank Bldg., Oakland.
Williams, R. B., Sausalito.
Gardner, J. T., Madera.
Watt, F. W., Placerville, El Dorado County.
Sample, T. N., Fresno.
Wilson, A. P., 1824 Central ave., Los Angeles.
Brill, W., 840 S. Hill st., Los Angeles.
Bryant, E. A., Pacific Electric Bldg., Los Angeles.
Corbin, F. E., 395 Bryson Blk., Los Angeles.
Davisson, J. H., Homer Laughlin Bldg., Los Angeles.
Dawley, C. G., 175 N. Spring st., Los Angeles.
Day, B. W., 142 S. Broadway, Los Angeles.
Fellows, Alfred, 411 Hellman Bldg., Los Angeles.
Gordon, F. H., 812 Braly Bldg., Los Angeles.
Hall, James S., 221 Bullard Blk., Los Angeles.
Hay, E. O., 315 N. Vignes st., Los Angeles, (Univ. So. Cal., '02; (C) '02).
Johnson, J. H., 814 N. 7th st., Los Angeles.
Lynn, S. B., add. unknown (letters returned).
McCullough, A. M. F., 422 Trust Bldg., Los Angeles.
Moore, M. L., Hellman Bldg., Los Angeles.
Nast, H. H., 257 S. Figueroa st., Los Angeles.
Winegar-Simpson, A., Glendale.
Thorpe, L. S., 747 W. 18th st., Los Angeles. (In Europe until January 1st).
Toland, M. R., 510 Grant Bldg., Los Angeles.
Walker, S. L., unknown (letters returned).
Walrath, G. B., 218 S. Broadway, Los Angeles.
Bowles, G. R., Ukiah, Mendocino County.
Leach, William Henry, Leach, William Harvey.

Wilson, F. E., Huntington Beach.
Mardis, B. A., San Francisco.
Russell, A. J., Oakland.
Look, H. H., 401 K st., Sacramento.
Nourse, B. S., Stirling City, Butte County.
Myers, J. J., Fisher Blk., Redlands.
Beadles, E. St. C., 2614 Channing Way, Berkeley.
Barkan, Adolph, James Flood Bldg., San Francisco.
Bill, P. A., 503 Montgomery ave., San Francisco.
Block, H. I., Bloch, H. I.
Bergstein, H., 1205 Oak st., Oakland.
Cameron, H. McD., Reno, Nevada.
Carson, G. R., S. F. R. R. Hosp., San Francisco.
Dillon, J. F., 396 4th st., San Francisco.
Donnelly, E. F., 1427 Webster st., San Francisco.
Gedge, Donald McC., 369 Sutter st., San Francisco.
Gunn, J. W., Jr., 2396 Bryant st., San Francisco.
Hart, H. H., 123 Ellis st., San Francisco.
Hoffman, L. H., 731 Sutter st., San Francisco.
Knorp, F. F., 1584 Market st., San Francisco.
Kucick, O. S., Kucich, O. S.
Magnus, Max E., Donohoe Bldg., San Francisco.
Meierdierks, W. A., 318 Haight st., San Francisco. (Temporarily in Europe).
Painter, Geo., office, 590 Sutter st., San Francisco.
Parsegian, J. H., Parsegan, J. H., Fresno.
Schmitt, L. S., 590 Sutter st., San Francisco.
Shiels, G. F., 56 W. 56th st., New York.
Wagner, J., 483 Valencia st., San Francisco.
Wilson, F. P., 2245 Sacramento st., San Francisco.
Zeile, E., 1717 California st., San Francisco.
Brown, R. W., Santa Maria.
Sanford, P., 53 N. 2nd st., San Jose.
Wilson, W. L., San Mateo.
Anderson, C. H., Santa Cruz.
Wood, E. G., Bacon Blk., Oakland.
Stratton, J. A., Newman, Stanislaus County.
Pitts, E. H., Knob, Shasta County.

Non-Members.

Allen, M. de L., Bacon Blk., Oakland.
Alvey, L. A., add. unknown (letters returned).
Davison, H. B., add. unknown (letters returned).
Pope, F. S., Calgary, Canada.
Freeman, C. H., 332 Presidio ave., San Francisco.
MacDonald, R. E., MacDonald, R. E.
Wolf, M. J. H., 1017 Oak st., San Francisco.
Adams, James, add. unknown (letters returned).
Berger, Bertha, add. unknown (letters returned).
Boyd, W. A., add. unknown (letters returned).
Burleigh, F. L., add. unknown (letters returned).
Coffman, H. L., 400 Oregon ave., Los Angeles.
Freedman, C., Pischacho, Arizona.
Gowan, J. S., add. unknown (letters returned).
Hall, Giles S., 609 S. Main st., Los Angeles. (Rush Med. Coll., Ill., '97 (C) '98).
Hamilton, I. B., add. unknown (letters returned).
Gumbiner, A. A., add. unknown (letters returned).
Haynes, R. W., 411 Hellman Bldg., Los Angeles.
Johnson, W. M., add. unknown (letters returned).
Le Duc, E. H., 126 E. 11th st., Los Angeles.
McLain, W. R. T., 356 S. Broadway, Los Angeles.
Pense, E. C., 723 Stewart st., Los Angeles.
Shank, G. A., Westminster, Orange County.
Russell, E. H., add. unknown (letters returned).
Shumway, J. P., 714 W. 9th st., Los Angeles.
Wylie, W. W., Hellman Bldg., Los Angeles. (Rush Med. Coll., Ill., '77 (C) '00).
Hyde, O. C., Washington, Nevada County.
Worthley, A. H., Penryn.
Hanvey, C. B. H., Union Savings Bk. Bldg., Berkeley.
Brooke, J. E., add. unknown (letters returned).
Creighton, C. J., 350 Brookside ave., Redlands.
Coryn, H. A. W., Loma Homestead.
Gray, A. J., (retired) San Diego. (Dartmouth Med. Coll., N. H., '60 (C) '96).
Morgan, A., 1451 6th st., San Diego.
Baumeister, B. H., 1538 Dolores st., San Francisco.
Bunnell, E., 123 Ellis st., San Francisco.

Byron, E. H., Guerneville, Sonoma County.
 Coffin C. Cook, (E) 14 McAllister st. San Francisco.
 (Calif. Med. Coll. '92 (C) '92).
 Dennis, S. W., 502 Sutter st., San Francisco.
 Etcheverry, M. H., San Diego.
 Evans, M., 419 Courtland ave., San Francisco.
 Gates, G. W., East.
 Fry, P. B., Benicia, Solano County.
 Goss, C. A., 606 Sutter st., San Francisco.
 Hailstone, C., 1474 Sacramento st., San Francisco.
 Hatch, H. W., 1098 Post st., San Francisco.
 Heintz, J. P. E., add. unknown (letters returned).
 Herrick, S. S., Randolph, Orange County.
 Howard, J. L., 391 Sutter st., San Francisco.
 Kingwell, J. J., 704 Folsom st., San Francisco.
 Kisner, T. J., 211A Capp st., San Francisco.
 Leit, T. N., 938 Sutter st., San Francisco.
 Magnus, Max, 1190 Market st., San Francisco.
 McGowan, E. J., Hornbrook, Siskiyou County.
 Oneil, M. E., 718 Post st., San Francisco.
 Palmer, F. S., 120 Broadway, New York.
 Palmer, May McK., 120 Broadway, New York.
 Pillsbury, H. H., (retired) Alden P. O., Oakland.
 Pillsbury H. F., (retired) Alden P. O., Oakland.
 Porter, C. S., Middleton, Arizona.
 Powers, G. H., Jr., 233 Charles st., Boston, Mass.
 Price, T. Linton, 1424A Powell st., San Francisco.
 Putnam, V. E., 834 Sutter st., San Francisco.
 Rogers, R. W., 4224 J st., "Car Town" San Francisco.
 Rosson, C. T., add. unknown (letters returned).
 Sage, F., 369 Church st., San Francisco.
 Sanborn, F. G., 1399 O'Farrell st., San Francisco.
 Sherrod, L. L., 6 O'Farrell st., San Francisco. (Bellevue Hosp. Med. Coll., New York, '85 (C) '99).
 Soule, M., abroad for indefinite stay.
 Traverse, A. W., add. unknown (letters returned).
 Van Meter, M. E., 1584 Market st., San Francisco.
 Williams, W. J. M., 1602 Stockton st., San Francisco.
 Wiborn, J. A., 391 Sutter st., San Francisco.
 Wyckoff, L. J., 1016 Powell st., San Francisco.
 Davis, S. B., Alliance Bldg., Stockton.
 Stites, Ida M., 17 E. Willow st., Stockton.
 Wight, Thos. H., add. unknown (letters returned).
 Selling, N. A., 1312 Van Ness ave., San Francisco.
 Kelsey, A. L., 638 Hellman Bldg., Los Angeles.
 Moffitt, J. A., Gridley, Butte County.
 Circe, Wm. J., Carson City, Nevada.
 Craycroft, H. J., Bank of Central Calif. Bldg., Fresno.
 Crawford, W. T., Fowler, Fresno County.
 Hill, H. G., Redlands (at present East).
 Johnson, W. B., Chico, Butte County.
 Nicolls, W. L., Nickolls, W. L., Petaluma.
 Page, C. W., St. Luke's Hosp., San Francisco.
 Riggire, L. L., Riffin, L. L., 104 Telegraph ave., Oakland.
 Pruett, W. C., City and County Hosp., San Francisco.
 Stone, E. A., 1111 Washington st., Oakland.
 Thrailkill, W. O., Hollister, San Benito County.
 Vrooman, S., China (Medical Missionary).
 Worthington, G. B., St. Luke's Hosp., San Francisco.
 Koford, H., Providence Hosp., Oakland.
 Middleton, J. V. D., Washington, D. C.

Deceased.

Notice of the deaths of the following doctors whose names appear in the Register has reached us since publication: Dean, A. J., Haywards; Harris, J. T., Gridley; Petrie, E. F., Santa Monica; Schafer, H., Monrovia; White, P. M., 143 N. Main st., Los Angeles; Whitefield, L., Monrovia; Wernigh, R., Stimson Bldg., Los Angeles; Ruby, W. S., Riverside; Wilcox, J. M., Patton; Kergan, J. D., 328 Hyde st., San Francisco; Casal, F. M., Santa Barbara; Thibodo, A. J., Santa Barbara; Johnston, J. N., San Jose; Smith, Driesbach, San Francisco.

New Licentiates.

The following candidates were granted certificates at the last examination, held in San Francisco October 25 and 26, 1904. Clair Belle Stockton, William S.

Lavy, Walter Turnbull, Jr., John S. Slavich, Harry C. Warren, John Howard Mules, George A. Harker, Carl Lemonde Powers, M. D. Baker, Robert J. Nicholls, Stuart Z. Peoples, Foster M. Hoag, John N. Chain, Gustavus I. Hogue, E. L. H. Swift, Lorenzo S. Morgan, Ruth Bennett Morgan, Martin McAulay.

AS WE SEEM TO NEW JERSEY.

"Our brother Jones, he of the CALIFORNIA STATE JOURNAL OF MEDICINE, doth wield a doughty pen. He calleth a spade by its right name and feareth not the consequences of speaking the unvarnished truth.

What medicine and medical journalism to-day need more than anything else is just such men as Philip Mills Jones. So many of us would like to do right and speak out in meeting if we only dared and if there were not so many reasons why it is not expedient to do so.

He alludes to some of us Eastern fellows as narrow-minded and hide bound. Strange as it may seem, the same thoughts have sometimes occurred to us, but we have stifled them in our bosom. However, we believe in the crusade he is conducting against the thralldom in which the patent medicine advertisers have wrapped the respectable, but easily worked medical editors and publishers of the East.

If the trustees of the American Medical Association and the Editor of its *Journal* have read some of Dr. Jones's remarks about themselves, we are disposed to believe that these good men have felt rather foolish."—*Journal of the Medical Society of New Jersey*.

[This comment is not reprinted because of any overmastering conceit on the part of the editor; the "kicks" come in with sufficient regularity to prevent that. The criticism which has been voiced by your JOURNAL was not uttered lightly and without consideration by the Publication Committee, and consequently we feel encouraged in knowing that other people in other places think we have done right.]

Iodothyrene; A Correction.

In our table of synonyms we have been publishing the statement that this substance is a "dried lactose trituration of the thyroid gland." The manufacturers have kindly sent us a copy of the letters patent No. 626,648, covering iodothyrene, which clearly show that it is a substance supposed to be the active principle of the gland, extracted by a special process, covered by the patent. We are very much obliged to the manufacturers for enabling us to correct this error, as our table, to be of much use, must be, above all things, accurate. We respectfully call the attention of our kindly disposed critics to the fact that this is a correction and not a "reading notice." The manufacturers of this particular chemical are not even to be found amongst the advertising patrons of the JOURNAL.—Ed.

Stovain; a New Analgesic.

The chemical name of this new drug is given as hydrochlorat of dimethyl-amino-benzoyl-temtanol. It was isolated by French chemists and is not patented; nor is the name "Stovain," controlled by trademark. The attention of physicians on this coast has been called to Stovain by Dr. Dudley Tait. Experimental and clinical work show it to be almost as analgesic as cocaine, over which it possesses numerous advantages. It is a vasomotor dilator, and not a constrictor, as is cocaine; analgesia is produced in a much shorter time; its poisonous action, as indicated by the relative lethal dose, is only about one-third that of cocaine. But little attention has been paid to Stovain, probably for the reason that it is not a controlled product and consequently no manufacturer has exploited it and the profession to his own gain. Those who are interested in securing a chemical that will do the work of cocaine without producing its unpleasant results, should investigate Stovain.

MEDICAL SOCIETIES.

California Academy of Medicine.

Meeting held in San Francisco, October 25, 1904.
The President, Dr. T. W. Huntington, being in the Chair.

Posture in the Treatment of Disease.

Dr. C. M. Cooper stated that patients frequently assume attitudes which are more or less beneficial to themselves; as for example, when an inflamed joint is immobilized by reflex muscular contraction, or when by a more volitional process, the chin-in-hand attitude is assumed in diseases of the cervical vertebrae. In other cases, an ignorance as to the nature of his disease does not permit the patient to reason out what would be the most advantageous posture to assume, and in these cases the physician should prescribe the attitude.

The value of a low position of the head in the treatment of the syncope caused by cerebral anaemia is universally recognized. It also seems logical, and has apparently been beneficial to employ a similar inverted posture in treating more chronic conditions of cerebral anaemia; *e. g.*, the anaemic insomnia of aortic regurgitation. Conversely a relatively erect position is advantageous in the treatment of congestive headaches, such as may occur in the early stages of cerebral inflammations, and in the treatment of the sleeplessness due to cerebral hyperaemia. Possibly also, the nocturnal headaches of many syphilitics and the nocturnal attacks of epilepsy are in some measure due to the relative congestion of the brain, occasioned by a lying posture. Possibly also, we may be able to influence the spread of inflammatory processes in the spinal meninges and in the spinal cord by elevating the foot or the head of the patient, and so in this manner we may be able to protect important structures from involvement in the disease.

The erect sitting posture assumed by patients with severe cardiac affections, is probably of direct advantage to them, and it should be tried more often in the earlier stages of the disease. Frequently it can be shown that the heart rate becomes slower in this position. The tracheal symptoms of aortic aneurysm may be relieved by having the patient lie face downward with a pillow under his chest, below the seat of the aneurysm. In pleurisy and pneumonia it is possible that the erect posture would tend to prevent the spread of the disease upward.

The nocturnal frequency of gall-stone colics may be due to the fact that when the patient is lying on his back the mouth of the gall bladder is at a lower level than is the fundus. Attacks of gall-stone colic have been aborted by having the patient assume the knee-chest position, thus favoring the falling back of stones from the neck into the fundus of the gall bladder. Possibly also renal colic could be thus aborted if the foot of the bed were elevated and the patient lay on the affected side. A right lateral position in appendicitis would tend to localize the inflammatory process to a comparatively favorable locality. A right lateral inverted posture should be tried in the treatment of dilatation of the stomach for this posture would aid in emptying the organ.

Dr. Rixford referred to a case described by Macewen where the patient said that he could not lie down. On being induced to do so by the physician, he died suddenly, and at autopsy a clot was found in the brain which had slipped down in the recumbent posture and caused death. The relief afforded by the sitting posture in cardiac disease is probably due to the fact that when the patient lies down, the abdominal contents press upon the overworked heart. In the Trendelenberg position, it is of advantage to place a pillow under the shoulders in order to render the abdominal wall less tense. When the patient, with a dilated stomach, is told to lie upon his right

side for the purposes of better drainage, we should remember that unless the contents of the stomach are heavier than are other abdominal structures, they will not sink to the pylorus, but will be pressed up by these other structures.

Dr. Sherman questioned the advantage of Dr. Rixford's modification of the Trendelenberg position for it would tend to interfere with respiration. The hand-in-chin position assumed by patients with cervical caries can hardly be called a voluntary position for the patients can not reason out its mechanical advantages. He would be inclined to regard it as a reflex.

Dr. Carpenter stated that he had seen patients with hydronephrosis who suffered considerable pain in the back when lying down, but in whom this pain could be relieved by elevating the head of the bed so as to favor drainage of the sac.

Dr. Cooper said that the Trendelenberg position was not without danger and had caused death. The characteristic position assumed by patients with cervical caries is not a reflex, but is voluntary. The patient himself has learned that this position relieves his pain, even though he does not understand why it should do so. When the individual with a dilated stomach lies upon his right side, the fluid in the stomach comes in contact with the pyloric region and so causes reflex peristaltic movements which tend to empty the stomach.

Remarks on the Diagnosis and Treatment of Fractures of the Neck of the Femur.

Dr. H. H. Sherman reported several cases of injuries about the hip which illustrate the importance of a special symptom, *viz.*, the inability of the patient to lift his foot off the table when lying on his back. In two of these cases this was almost the only important symptom pointing to a fracture of the neck of the femur. In a third case of hip injury, the symptoms, however, comparatively little attention was paid to it and subsequent events showed that both patients had had impacted fractures of the neck of the femur. In the third case of hip injury, the patient could lift his foot from the table and the X-ray showed no fracture. Great care should be taken in all cases not to do violence to a femur, which is the seat of a supposed fracture, for an impacted fracture may easily be converted into an unimpacted one by manipulation. For this reason an examination should never be made under an anaesthetic.

In the operative treatment of ununited fractures of the neck of the femur, it is extremely difficult to drive a nail into the head and to obtain a good alignment. Furthermore, as a rule, only fibrous union is obtained. In two children who had been operated upon, it was found that the shortening of the leg gradually increased and a coxa vara developed probably on account of a fibrous union of the fragments.

Dr. Rixford stated that the effort to lift the foot off the table necessarily brought considerable strain upon the fragments on account of the great leverage involved. For this reason he would hesitate to use the test described by Dr. Sherman. A symptom of considerable importance in fractures of the neck of the femur, is the relaxation of the fascia lata above the great trochanter. He has operated upon one case of ununited fracture of the neck and obtained a good result.

Dr. Hunkin, in reply to Dr. Rixford, stated that if the patient had a fracture of the neck, he would not attempt to lift the heel off the table, so that there is no danger in the test. Personally he believes that the test is a good one. Other important diagnostic points are the local tenderness and the pain on slight rocking movement of the joint. The shortening of the extremity which occurred in the cases of the children operated upon was perhaps caused by an injury to the epiphyseal line.

Dr. Sherman stated that early operation in cases of fracture of the neck of the femur was not justified. The fracture is not usually at the epiphyseal line so that it should not interfere with the growth of the bone.

A. W. HEWLETT, Secretary.

Redlands Medical Society.

The regular monthly meeting of the Redlands Medical Society, was held in the Y. M. C. A. parlors, on Wednesday afternoon, October 19th, 1904. The members present were Drs. Evans, Browning, Tyler, Pounds, Strong, Major, Payton, Taltavall, Moseley, Wheat, Blythe, Sanborn and Shreck. Dr. J. L. Avey was a visitor. After the reading of the minutes of the June meeting, the president, Dr. Payton, referred feelingly to the bereavement of Drs. Moore and Taltavall, who recently lost their wives by death, and, in accordance with the vote of the society, appointed Drs. Major, Moseley and Strong a committee to draft resolutions of sympathy and respect. The matter of entertaining the Foothill Medical Circle, which is composed of the medical societies of Pomona, Redlands and Riverside, and which meets in Redlands on November 16th, was brought up, and, after some discussion, it was decided to leave the whole matter in charge of a committee of arrangements, consisting of Drs. Moseley, Blythe and Payton, with full power to act. Dr. Tyler was appointed a committee of one to have charge of the financial arrangements. Dr. Browning, the president of the San Bernardino County Medical Society, announced that the annual dues of the State Medical Society had been raised to \$2.00. Dr. Pounds read an interesting paper on "The Use and Abuse of Forceps and Chloroform in Labor." The author deprecated the tendency to a too hasty resort to these valuable obstetric aids, and pleaded for more conservatism in their use, contending that many cases of labor would terminate more favorably if left to nature. The paper was discussed by Drs. Browning, Major, Avey, Strong, Blythe, Shreck, Wheat and Payton, who agreed in the main with Dr. Pounds. The application of Dr. J. L. Avey for membership was referred to the Board of Censors. Dr. Pounds exhibited a cancerous uterus removed at a very early stage, with a microscopical section showing the malignant nature of the new growth. Dr. Strong exhibited ovaries and tubes removed from a patient for ovarian abscess.

WM. A. TALTAVAL, Secretary.

Fourth Pan-American Medical Congress.

The Congress will be held at Panama, January 2nd to 6th, 1905. California physicians desiring to attend will have to leave San Francisco December 10th, arriving at Panama January 1st; returning, they can leave Panama January 10th, reaching San Francisco February 2nd. California has been rather unusually favored in the selection of the various secretaries. Dr. H. Bert. Ellis, of Los Angeles, is secretary of the section on Ophthalmology; Dr. George Goodfellow, San Francisco, secretary of section on Military Surgery; Dr. D. W. Montgomery, San Francisco, secretary of the section on Dermatology.

Dr. Rudolph Matas, secretary of section of General Surgery for the United States, asks those who wish to contribute papers to send titles to him at No. 2255 St. Charles ave., New Orleans. He also announces that the United Fruit Company's agents are offering as a special inducement to American "Congresistas" a reduction of the regular fare for the round-trip from New Orleans to the Isthmus to \$50.00, that is, \$25.00 each way. The steamers leave New Orleans every Friday; the last steamer to leave New Orleans in time for the opening of the Congress will sail on December 30, 1904, at 11 A. M. It takes about four and one-half days to reach Colon, and seven days on the return trip on account of a stop-over at Port Limon, where ample opportunity is given to tourists

to visit San Jose, the beautiful capital of Costa Rica—"the Paris of Central America"—where the most picturesque tropical scenery can be seen at this season, under the most favorable conditions.

PUBLIC HEALTH ASSOCIATION.

The California Public Health Association held a meeting in San Francisco on October 29th. The sessions were held in the assembly room of the Board of Health in the City Hall. A banquet was given the members by Dr. J. W. Ward, the president of the local Board of Health, at the Palace Hotel.

The following was the program: "Sanitary Legislation," Hon. W. I. Foley of Los Angeles; "Prevention of Typhoid Fever," Dr. Geo. F. Reinhardt of Berkeley; "Observations While Traveling," Dr. R. L. Wilbur of Stanford; "Modern State Hospital Sanitation," Dr. Kelley of Agnews; "Flies as Carriers of Contagion," Dr. Geo. H. Aiken of Fresno; "Medical Inspection of Schools," Dr. Edward von Adelung of Oakland; "Milk," Dr. D. F. Ragan of San Francisco; "Service in the Laboratories of Municipal Health Boards" (Post Prandial), Dr. J. W. Ward of San Francisco.

The officers of the association are: Dr. Lemoyne Wills, president; Dr. Thos. Ross, vice-president; Dr. N. K. Foster, secretary-treasurer.

Executive Committee, Dr. Edward von Adelung, chairman, 1068 Broadway, Oakland; Dr. N. K. Foster, Dr. William Simpson, Dr. D. F. Ragan.

XVth International Congress of Medicine (Lisbon, April, 1906). We have received the second and third numbers of the *Journal of the XVth International Congress of Medicine*, Lisbon, 1906. They contain the report of the actual affairs and the most important resolutions of the Central Committee. It is to be pointed out the Colonial Exposition that will be organized at the moment of the congress and the inquiry about the Pellagra in Portugal, an enterprise undertaken by the section of psychiatry. In the two numbers there is a list of the subjects of official reports, with the names of the authors that accepted the charge. In every section there is also a list of recommended themes for free communications. Lastly, the *Journal* publishes the list of the national committees of the several countries where they are already constituted—nearly all.

Mississippi Valley Medical Association.

The officers elected at the 30th Annual Meeting of the Mississippi Valley Medical Association, held at Cincinnati, O., October 11-13, are as follows:

President, Bransford Lewis, M. D., St. Louis; First Vice-President, Frank Parsons Norbury, M. D., Jacksonville, Ill.; Second Vice-President, J. H. Carstens, M. D., Detroit, Mich.; Secretary, Henry Enos Tuley, M. D., Louisville, Ky.; Assistant Secretary, John F. Barnhill, M. D., Indianapolis, Ind.; Treasurer, S. C. Stanton, M. D., Chicago, Ill.

Next place of meeting Indianapolis, Ind., October, 1905.

HENRY ENOS TULEY, Secretary.

American Public Health Association.

The thirty-second annual meeting of this Association will be held at Havana, Cuba, January 9-13, 1905. The President of the Association is Dr. Carlos J. Finlay, Havana, and the Secretary is Dr. Charles O. Probst, Columbus, Ohio.

The Arkansas Medical Society, on June 15th, commenced the publication of a monthly bulletin in a form that is rather unique. It contains no scientific papers, and is intended to be only a sort of news distributor to the members of the society. Official notices, comment on pertinent questions and things of that sort go to make up the *Bulletin*, and it ought to prove a very welcome institution to Arkansas physicians.

COUNTY SOCIETIES.

Alameda County.

(In the last report, November JOURNAL, page 349, it is stated that Dr. L. L. Riggie read a paper. This is in error; the name should have been Rigglin.—Ed.)

The regular meeting for November was held in the Hotel Metropole, Tuesday evening, November 8th, the President, Dr. J. Maher, in the chair and forty-eight members in attendance. Dr. W. D. Huntington read a paper on "Biliary Calculi" in which he discussed the symptoms, diagnosis and surgical treatment of the disease. The paper was thoroughly discussed by Drs. Stratton, Milton, Ewer, McCleave, Emerson and Piercy.

Dr. J. C. Akerly read a paper on the subject of "Ulcerative Endocarditis," relating in detail the history of a particularly interesting case of this affection. In conclusion he stated that for a clear diagnosis we should have, first, symptoms of septic infection; second, symptoms of cardiac involvement; third, evidence of infection of the blood; fourth, symptoms of emboli. The paper was discussed by Drs. Adams, Pond and Rigglin.

During the executive session a copy of the resolutions passed by the Santa Barbara County Society in favor of vaccination was read. Dr. N. K. Foster, Secretary of the State Board of Health, spoke at some length on the vaccination question in California. He emphasized the fact that there is a strong effort being made to have the coming legislature repeal the present compulsory vaccination law. In order to prevent this the medical profession should use its influence with senators and assemblymen. A committee was appointed to draw up a resolution to be acted upon by the Society at its next meeting. At the conclusion of the meeting the members were served with light refreshments and a social half-hour was indulged in.

J. M. SHANNON,

A. S. KELLY,

Publication Committee.

Fresno County.

The Society met with an attendance of twenty-five physicians, at the offices of Dr. George H. Aiken, the First Vice-President, Dr. P. Manson in the chair. After the roll call and reading the minutes of the previous session, the names of Drs. H. St. John Hely and H. J. Craycroft were proposed for membership and referred to the board of censors.

A communication inclosing a resolution recently passed by the Santa Barbara County Medical Society, declaring its firm belief in the efficacy of vaccination as a preventive of smallpox, was read, and the Society was pledged to use its efforts with the members of the legislature to forestall the probable attempt that will be made at the coming session to annul the law relating to forced vaccination of school children.

A resolution was introduced and adopted setting a minimum charge of \$5.00 for administering anesthetics for dental patients, and the dentists of Fresno County will be notified to that effect.

The Committee on Ethics, heretofore instructed to consult with Dr. J. L. Martin, relative to certain irregularities in the matter of advertising, made report without recommendations.

For the enlightenment of the JOURNAL readers, I will state that Dr. Martin is the President of our Society and has always been a much-respected and popular member. Recently, Dr. Martin has equipped his offices with a static machine, Finsen light, hot-air ovens, vibrating apparatus, etc., and has styled his offices a "Therapeutic Institute," and used the daily papers to a marked extent, in giving publicity to these features. This procedure was frowned upon by many members of the Society as going beyond the bounds of ethics. After the Committee on Ethics made report,

Dr. Martin forestalled any action the Society might take by handing in his resignation as a member, explaining at the same time, that, as he interpreted the code of ethics, he was entirely justified in his conduct, but inasmuch as he has been criticized, he felt he should withdraw. The resignation was accepted.

The matter of contract work for fraternal societies was brought up and discussed and a committee of three appointed to draft suitable resolutions for adoption, whereby this practice shall be stopped.

The paper of the evening was prepared by Dr. A. J. Pedlar on the subject of typhoid fever, being a general resume of the cases treated at the County Hospital during the past year.

After the meeting an hour of social enjoyment was passed with light lunch and refreshments.

ANGUS B. COWAN, Secretary.

Monterey County.

At the regular meeting held September 3rd, the following resolution was adopted:

Resolved, That the Monterey County Medical Society believes in proper vaccination as a protection against smallpox, and that it is the conviction of this Society that the law making the vaccination of school children compulsory, should remain in force and should be fully complied with.

At the regular meeting held October 1st, the following resolution was adopted:

Resolved, That it is the sentiment of this society, that it is detrimental to the best interests of the members of the medical profession to accept contracts to do practice for lodges or fraternal orders of any description; and that it is wrong in principle and lowering to the dignity of the medical profession to accept such contracts, whereby we agree to do an indefinite or unknown amount of work for a stipulated fee. Therefore, be it

Resolved, That the Monterey County Medical Society discountenance the acceptance of contracts from any lodge or fraternal order.

And at the same meeting, October 1st, there were presented two charges of illegal practice by members of the medical staff at the Presidio of Monterey, and the Secretary was instructed to warn these medical officers that the Monterey County Medical Society would institute proceedings against them if there should be any further violation of the law by them.

T. C. EDWARDS, President.

D. BRUMWELL, Secretary.

Orange County.

The Orange County Medical Association met in regular session Tuesday evening, November 1st. The Board of Censors reported favorably on the application of Dr. Jesse M. Burlew, but owing to the lack of an election quorum, no ballot was taken. The application of Dr. G. A. Shank was read and referred to the Board of Censors. Dr. J. L. Dryer read the paper of the evening, the title being "Fads and Fallacies." The doctor handled his subject in his customary style by giving us plain, unvarnished truths. The society voted to request Dr. Dryer to furnish a copy of the paper to the STATE JOURNAL for publication, which he consented to do in a short time. Our society is growing in numbers and there is no lack of interest which is gratifying to the members who have in the past fought for the organization of a clean ethical society.

H. S. GORDON, Secretary.

San Joaquin County.

The last meeting of the San Joaquin County Medical Society was held at the office of Dr. Barton J. Powell. Two cases of hemorrhage after tonsillotomy were reported. One case was of especial interest, being that of a healthy boy of fifteen of good family history. The hemorrhage was controlled with a ton-

sillar tourniquet and patient discharged. One week later another hemorrhage occurred but was checked with epinephrin solution without pressure. The patient rapidly regained his normal condition. The case was freely discussed and the value of the tourniquet in these very occasional cases appreciated. The value of the snare over the tonsillotome brought out liberal discussion. The following members were present: Drs. Maddock, Ray, Hull, Smyth, Goodman, Crowder, Hopkins, Harbert, Arthur and Powell.

BARTON J. POWELL, Secretary.

Santa Barbara County.

The Santa Barbara Medical Society held its regular meeting Wednesday evening, October 12th, 1904, in the parlor of the Arlington Hotel. The meeting was called to order by Dr. Chas. Anderson, president, and the following members were present: Drs. Barry, Conrad, Cunnane, Casal, Dial, Flint and Mansfield.

On motion made and carried, the following resolutions and letter were ordered published in circular letter form and a copy sent to each County Society in the State of California:

SANTA BARBARA, CAL., September 17th, 1904.

DEAR SIR:—At a regular meeting of the Santa Barbara County Medical Society held in the parlor of the Arlington Hotel, September 14th, 1904, the following resolutions were unanimously adopted:

Resolved, That the Santa Barbara County Medical Society hereby reaffirms and emphasizes its belief in proper vaccination as a protection against smallpox; and that it is further of the decided conviction that inoculation with pure vaccine virus followed by cleanliness of the wound with good sanitary surroundings is an entirely innocent and harmless measure.

The Secretary is hereby instructed to furnish a copy of the above resolutions to each daily paper published in Santa Barbara; also one copy to the Secretary of the California State Board of Health, and one to the Secretary of the California State Medical Society.

W. B. CUNNANE, Secretary.

CALIFORNIA STATE BOARD OF HEALTH,
SACRAMENTO, CAL., Sept., 19, 1904.

Dr. W. T. Barry, Santa Barbara, Cal.—

MY DEAR DOCTOR: I am extremely glad to see the interest you and the Medical Society of Santa Barbara show in the question of vaccination. If every Medical Society in the State would take this matter up it would do a great deal of good. There will be a severe fight in the next legislature to repeal the vaccination act and it depends upon the physicians to see that it is not carried.

I wish that your Society would mail a copy of the resolution to every Medical Society in the State, asking that they pass the same or similar resolution and see that their assemblymen and senators are thoroughly posted on the subject. This must be done by some one, for they are making a bitter fight.

Yours very truly, N. K. FOSTER, Secretary.

The regular essayist being absent, Dr. Charles Anderson read a very interesting paper on "Odor Humane." The doctor said that each race has its own distinctive odor, and that the odor of the lower order of animals is characteristic of that particular kind of animal, and is found in the fatty component of the perspiration. He referred to a paper published by Dr. Adacki on the disagreeable odor of Europeans, attributing it to their meat-eating habits, and claiming that there is no odor perceptible from the vegetarian Chinese and Japanese. This the doctor controverts, pointing out the fact that the vegetarian negro possesses the most marked racial odor. He also refers to the peculiar odor of the American Indian and of the Filipinos. He also observed a decided odor given off by the persons of the Japanese in the markets of Nagasaki. He said the various diseases gave off characteristic odors; notably, measles, typhoid and typhus

fever, variola, rheumatism, gangrene, pyemia and carcinoma.

The regular meeting for November was called to order on the night of the 9th, at the parlor of the Arlington Hotel, by the President, Dr. Charles Anderson. There were present Drs. Anderson, Barry, Conrad, Cunnane, Dial, Flint, Morrey, Newman and Sidebotham, and as visitors Drs. Appel, U. S. A., and Abbott of Pasadena.

Dr. Flint reported a case of malarial fever from the interior of the State in which the patient had one well-marked paroxysm after reaching Santa Barbara. The curious part of the case is that the patient was exposed to malarial infection for only a single night. The plasmodium malariae was well marked at the time of the first examination of the blood, but was not detected at the end of ten days; the hemoglobin went from 70 to 83 at the termination of the treatment, which consisted of quinine sulphate.

The paper of the evening, "Adenoids," by Dr. E. A. Dial, was read and discussed. After commenting upon the proneness of physicians to ride a hobby and disclaiming anything of that sort for himself, he proceeded to give a history of the discovery of the cause and treatment of the condition by Hans Wilhelm Meyer of Copenhagen. He then discussed the anatomy of the parts and said the pharyngeal tonsil existed only in children, becoming atrophied at the beginning of adult life. He said Meyer defined it as an enlarged pharyngeal tonsil which became hypertrophied or formed adenoid vegetations, producing various well-marked symptoms and conditions, such as deformed facial bones, pigeon breast, mouth breathing, asthma, deafness, stupidity, idiocy, insanity, ozena, pharyngitis, etc. The diagnosis is usually easily made. The condition seldom or never occurs in adult life nor does it develop earlier than the second year. In treatment local applications are utterly useless; removal by operative means only should be practiced. It is sometimes necessary to operate two or three times before a cure is complete. It is usually necessary to teach the child to breathe through the nose after operation. Dr. Conrad said he approved of everything the writer had said, and the necessity for the examination and proper treatment of the nose and throat of school children should be impressed upon parents and teachers.

Dr. Morrey read a belated paper on "Pneumonia." After devoting several pages to a discussion of the causes of and conditions existing in pneumonia of the lobar type, he devoted his attention to the treatment. He said he was very skeptical of the value of drugs and relied more upon hygienic and dietetic measures and local applications. He discouraged excessive stimulation and specific treatment. It is his custom when first called to administer calomel and soda, aa grs. 1, every two hours, and if the temperature should exceed 102.5°, follow it with small doses of phenacetin and quinine. If the temperature reaches 104° or more, he uses cold sponging, and in case of bounding pulse gives tincture aconite in 1 minim doses till relieved, and for the purpose of sustaining the heart, strychnin in 1-50th grain doses. Dr. Flint said he approved the use of strychnia; he had been able to tide many patients over the critical stage by the liberal use of oxygen.

Dr. Appel gave an interesting account of his experience with the treatment of the disease in the high elevations of New Mexico, especially in its occurrence in the tuberculous at Fort Barrett, where it was usually fatal. Dr. Abbott said it was his custom when the temperature runs high with bounding pulse, to administer tincture veratrum viridi, 10 drops in a glass of water, one teaspoonful every half hour until the symptoms moderate and thereafter every three hours.

The following resolutions in the memory of our late associate, Dr. F. M. Casal, were then presented by Dr. Flint and adopted by the Society:

Resolved, That the Santa Barbara County Medical Society desires to express its deep sorrow at the death of Dr. Francis M. Casal, one of the oldest members of the Society, who endeared himself to its members and to the community by the constant fidelity, integrity, generosity and kindness which characterized his life as a citizen physician and public officer.

Resolved, That the Santa Barbara County Medical Society extends to the members of Dr. Casal's household its deep sympathy in their bereavement, and that a copy of these resolutions be presented to the family and to the public press.

Dr. Casal died at his home in Santa Barbara, California, November 6, 1904, aged 62 years.

W. B. CUNNANE, Secretary.

Sonoma County.

The Sonoma County Medical Society met in a large parlor at Eldridge. Dr. Dawson immediately began his clinic. He introduced the subject of Hydrocephalus, and presented a boy 13 years old.

History: This thirteen-year-old boy had all the symptoms of hydrocephalus. The following history obtained from father: At birth his head was very large, but not so large as to interfere with labor or suggest water on the brain. He was exceptionally bright until four years old, could talk as well as any child of his years. He was very sensible and would look after his younger brother, two years of age, like a grown person. He was accustomed to driving out in a cart with his father, and delighted in taking the lines and driving the horse. He was also in the habit of running and playing with other children in the neighborhood, and everybody who saw him would remark concerning his large head; but his body was also large and strong and he was always cheerful and good-natured and never rolled his head as he does now. When about 4 years old he had spasms, from 5 to 15 a day, for about six months. He wasted away to a mere skeleton; then the spasms stopped and his mother noticed he could not see. She thinks he lost his sight in one-half hour. He got stout and strong again gradually, but although he tried, he never could sing his old songs again. He apparently forgot how to talk and has never been able to learn anything since.

In speaking of hydrocephalus, the doctor said in part: The acute form of this disease was regarded by Prof. Alonzo Clark of New York, in 1866, as synonymous with tubercular meningitis, although he would not admit that the granular matter found on post-mortem in the latter was tubercular in character. Chronic hydrocephalus may be congenital or acquired; when the latter, it is simply the result of acute hydrocephalus. It is rather a dropsy than an inflammation, but the causes of this condition are not definitely known. The effusion may be external or internal, or both; internal when found in the ventricles, external when found either in the subdural or subarachnoid space. According to Dr. Clark, when idiocy is the result, the disease is usually congenital. The skull is large, forehead globular, rounded and prominent, eyes deep set, and face by contrast of large head appears small. The majority of patients are idiots. These patients are always good natured.

He brought in a boy 13 years old, who could not walk. Microcephalus; head about the size of a newborn infant. This patient did not know enough to feed himself.

Dr. E. T. M. Hurlbut gave a treatment of epilepsy: Tincture of absinth gtt. V the first dose; after that one drop every hour when child was awake, for 3 days; then one drop every 2 hours for 3 more days; then 4 drops a day, 1 drop a half-hour before meals, in water, for 3 months; the child had no more fits.

One application for membership was received. We then chose Santa Rosa as meeting place for November 10th, 8 p. m., Dr. Mallory's office. The following resolution was introduced:

Resolved, That the members of the Sonoma County Medical Society do not enter into any contract with any lodge, association, corporation, society, or individual, for any consideration, whether same be money or otherwise, other than that named in the Fee Bill or schedule of prices adopted by this Society; also that from and after the date of the passage of this resolution, any violation of this will submit the violator to expulsion from the Society and deprive him or her from any of its benefits.

When we adjourned to the banquet room, and our wives now joined us about the festive board and a right merry occasion it was. Dr. and Mrs. Dawson did the honors as they only can. Dr. J. W. Jesse, president, on behalf of the Society, thanked our host and hostess and assured the members of the Society that at our next meeting we should banquet in Santa Rosa.

The regular meeting for November was held in the office of Dr. G. W. Mallory, November 10th. The following doctors were elected to membership: H. A. Makinson, Charles H. Thompson, W. D. F. Ward, Lizzie Lain and J. G. Pierce. Dr. Byron of Guerneville was proposed for membership by Dr. J. H. McLeod.

After a great deal of discussion concerning the resolution about lodge practice, it was agreed upon as the proper mode of procedure, to send the following letter and ballot to each member:

SANTA ROSA, CAL., November 11, 1904.

DEAR DOCTOR: At the meeting of the Sonoma County Medical Society last night a motion prevailed instructing the Secretary to send out a letter to every member of the Society, containing a copy of the following resolution and asking them to please express themselves by filling out the space at the bottom and signing and returning to the Secretary. The reason for this action is that an expression from every member of the Society is wanted before a definite action is taken on the adoption of the same, as it is not probable that there will ever be a meeting of the Society where all of its members are present. It is not the desire of a few to pass the resolution without first getting an expression from the entire membership. The resolution is to be voted on at the next meeting of the Society, so please give this your attention now and help us reach a harmonious as well as satisfactory disposition of the question involved. We meet December 8, 1904.

To the Sonoma County Medical Society, Officers and Members.—

I beg to offer the following resolution:

"Be it resolved that the members of the Sonoma County Medical Society do not enter into any contract with any lodge, association, corporation, society or individual for any consideration, whether same be money or otherwise, other than that named in the fee bill or schedule of prices adopted by this Society. Also that from and after the date of the passage of this resolution any violation of this will submit the violator to expulsion from the Society and deprive him or her from any of its benefits.

Nothing contained in this resolution is to be construed to apply to the office of County Physicians, City Health Officers or U. S. Army and State Militia Surgeons or examiners.

P. A. MENERAY, M. D."

I am in favor of the foregoing resolution, and if adopted by the Sonoma County Medical Society I will not do practice prohibited thereby.

Signed M. D.

The Society then adjourned to the Grand Hotel and enjoyed an excellent banquet, from which they departed, at 12:45 A. M., full of good things in mind and body.

The next meeting will be held December 8th, 8 p. m., at the office of Dr. Mallory. In addition to the final action on the resolution proposed, there will be election of officers for the ensuing year.

G. W. MALLORY, Secretary.

San Francisco County.

Meeting called to order at 8:45 P. M., November 8th, the president, Dr. Rosenstirn, in the chair. Minutes of the previous meeting were read, and approved by the Society. Propositions for membership, Dr. Henry Lissner, Dr. Victor Luchetti. Report of Committee on Admissions: Drs. Wm. F. Blake, Millicent Cosgrove, James B. Hannah, Arthur D. Hirschfelder, Max E. Magnus, Mary W. Turnbull, elected to membership.

Dr. C. S. G. Nagel presented a case of amblyopia from wood alcohol poisoning and said: Maybe some of you have noticed a report by Dr. Casey Wood of serious results following injestion of wood alcohol. A brief presentation of this case of mine will show the importance of the subject. The affection, amblyopia, is undoubtedly a peripheral one, not of central origin. Whether the retinal ganglian cells are primarily affected or it be a neuritis, is a point for argument. With regard to this case I will confine myself to the chief data relative to the eye symptoms. The history is as follows: About three years ago he partook for six days of small quantities of wood alcohol once or twice daily, and after that one evening he partook of fifteen ounces of alcohol. Immediately after that he fell in a dead stupor. In the middle of the night he awoke and got up to get some water. He lighted a match but found that he could not see it, so he lighted a paper, which he could not see either. He went to sleep again and in the morning could see as well as ever. About 2 P. M. the vision got bad again and towards evening he once more was completely blind. This recurrent blindness is a feature in these cases. During the second attack he remained blind for five days. After that he improved slowly, but about two months later the vision failed again. He continued with these varying ups and downs, on the whole going down most of the time. About March I saw him and he then presented undoubted evidence of glaucoma and I did double iridectomy, which improved the fields. Since then he has been going down hill. Of course there is nothing to be seen except through the ophthalmoscope.

Dr. Barkan said, in discussion: In relation to this case presented by Dr. Nagel, I will simply say that it is indeed a very interesting one, and the first I have seen. They are not very frequent here. I am much obliged to Dr. Nagel for this opportunity to observe a case of this sort.

Dr. Thos. W. Huntington read a paper on the Analysis of Fifteen Cases of Breast Amputation for Cancer. (This paper will appear in the JOURNAL, together with Dr. Rixford's remarks, in a subsequent issue).

Dr. Carpenter said: I would like to confirm what Dr. Rixford has said with regard to the minimum disability following operation for cancer of the breast. It is a fact that the functions of the anterior portions of the deltoid are influenced by the absence of the other muscles, and patients in time learn to make unlimited use of their disabled arms. My own experience in the line of recurrence has been that it generally occurs through the intercostals to the lung. In one case which I recall the metastasis was in the stomach; in another, in the liver; but in general they have been to the intercostal spaces, involving the lung, and the patients have died.

Dr. Kreutzman said: The most difficult part of these cases, in my experience, is the diagnosis. Sufficient stress has been laid upon that, I think. But I have especially in mind the women who at their menopause, have nodules in their breasts. I have found it very hard to make differential diagnosis and certainly the physician does not want to operate on every patient; nor does he want to lose chances of early operation. In these malignant cases two things are most necessary; early diagnosis and radical operation.

Dr. Stillman said: In connection with this subject I recall one of my own cases, the wife of a prominent physician. The whole proposition for these patients is the matter of diagnosis, and it is not to be dismissed so easily or readily as intimated in the papers read to-night. It is often hard to get the consent of the people, and sometimes even in the families of medical people themselves. This woman was past middle age and there was a hard nodular tumor in the upper and outer quadrant. Had all the manifestations of malignancy. The plan was to go to Halstead, as the husband said that he had seen several other surgeons who gave the same advice that I had given. On the train the patient got up in the night, was thrown violently by the sudden jerking, her breast struck against a seat, causing her great pain, but the next morning there was nothing to be found of the tumor. The cyst had ruptured, of course. That cyst was taking that woman to New York, and if she had been my patient I should have removed that tumor. Age has much to do with the prognosis of these cases. Another thing is the variety and character shown by the microscope, and until it is out one cannot tell much about it. There was one case of a young woman just under 40. The tumor was discovered by a masseuse. It was no larger than a very small lemon, in the outer and upper quadrant of the breast, movable and smooth on surface, and I took it to be a cyst. The woman came for an operation. I made an incision quite superficially. It was plainly malignant. I did the Halstead operation, did not remove the pectoralis minor but did remove the major. That woman had recurrence inside of six months.

Dr. Blummer said, in reply to a question as to the advisability of making section and microscopical examination at the time of operation: During the year that I worked with Dr. Halstead I saw him operate on a good many patients, and many times a frozen section was made and he went on with the operation within fifteen or twenty minutes. I have never known him to allow twenty-four hours to intervene. As far as I know there were no bad results from that procedure.

Dr. Wemple said: I have had a little experience with breast amputations and my results are about as satisfactory as stated by the gentlemen who have read these papers. In 1888 I removed a large carcinoma of the left breast involving the entire gland and a portion of the ribs beneath. I removed this not with the idea that it would not return, but with the idea that it would give the woman relief from the pain, which was excessive. I chiseled out a portion of some of the ribs; others I resected leaving the pericardium in perfect view, closing the wound over with skin, drawing it over very carefully. I hoped that she might live. In four weeks she was well. In the fifth week she developed pneumonia and nearly died. She is now, however, still living in Los Gatos and perfectly well. It was carcinoma. The specimen was carefully examined and there was no doubt of the malignancy. With other cases, I have had two recurrences within one year after operation. Since 1888 I have only had about five cases altogether. I have not traced them recently but know of two who are not dead.

Dr. Wakefield said: For the last eight years I have made it a rule to make an incision under local anesthetic and remove a piece of the tumor for examination. I have not been able to get my reports immediately and I have invariably made the examinations and waited a sufficient number of hours, ten or twenty-four hours. The patient has been in the hospital, has been put back to bed and ready for operation at any time. As soon as I got the report I performed the operation, radical if malignant. In that way I have saved several breasts which otherwise would have been sacrificed. I am unable to differentiate in a vast number of these cases between

the malignant and the non-malignant. A large amount of histological investigation has shown us that a great many of these tumors are not malignant. I have recently seen one of our prominent surgeons remove the breast from two patients, afterwards proved to be simply fibroid adenomas. I have seen no bad results from this procedure.

Dr. Huntington said: My object in presenting this paper to-night was two-fold. First, to add a little something to the literature on this subject which would be of some avail to other men doing similar work; secondly, to emphasize the fact that we must not be too encouraged by the reports coming to us from such masters as Halstead and others. We cannot hope at the present time to attain these results. We cannot at any time until the average medical practitioner, the practical clinical worker, realizes what early metastases mean, and their entire significance. With regard to early exploratory incision, I think we are coming gradually to explore all breasts in some way or another. It may be done under a general or local anesthetic, or it may be done while the patient is awaiting the operation.

Dr. Rixford said: I also had a case where I excised the breast without the radical operation. When the tissue was examined it showed that it was carcinoma. I then did the radical operation after four or five days. That case was the worst with regard to metastases. By most careful examination it is not possible in some cases to make a diagnosis. It is not necessary to make your diagnosis the first time you see the patient. It is a great deal wiser and you meet with the least resistance from the patient if you do not rush it. I do not tell the patient that the thing has to be operated on immediately. I watch it and study over it, and then I make the diagnosis and by that time the patient is not in such a mental condition that she will not have the operation. I remember one case in which there was very evident carcinoma of the breast where I took the opposite stand and insisted upon early operation and the patient disappeared. The husband came a few days later saying that his wife was going to have treatment from an old Indian woman who could cure such things. He wanted me to be present and see that the Indian woman did not do any harm. I declined the privilege. Four months from that time the patient returned to me. There was a great hole in the breast and a row of little tumors all about it. Large tumor in the axilla. I still thought there was a chance to save the woman and did a radical operation. That was twenty-one months ago and the patient has had no recurrence. With regard to closing the wounds it is my custom to remove a wide area of skin. It is often easy to close a wide defect by means of the other breast. Richardson of Boston says that the opposite breast can be lifted up through the same incision several inches which will relieve the tension on the flaps. You can close the wound even though you remove a very large area of skin. Skin grafting is a very satisfactory way of closing the wound. With regard to the dressing of these cases afterward. They should be dressed most comfortably. Patients dislike to have their arms bound down, and it is dangerous also to the flaps. A tight dressing on these very thin flaps causes necrosis. I put on a comparatively small dressing with a binder running around the outside.

Dr. S. J. Gardner presented some clinical notes on "An Unusual Infection in the Bones of the Foot."

Dr. Gardner said: We wish to show the specimen of this case as it is one of unusual interest, especially to California physicians. A formal report will appear at some later time, as we are doing some work that will take considerable time and we do not wish to report the case formally until this work is completed. I believe there are six other cases reported that are similar to ours. Most of these patients have appeared to contract their disease in the San Joaquin Valley.

The patient, F. H., Swedish, born in Daso, Minn., November 14, 1872; came to California in 1895, worked on a ranch for four years at Newman; began working for the Southern Pacific Company in pumping station at Mendota as engine wiper in 1899, which vocation he has followed up to the time of the present illness. Mother died of cancer. Father still living. Had never been ill before present onset of sickness. Four years ago he jumped from the tender of an engine, spraining and bruising the right foot, slightly, causing some pain; his foot gradually became swollen and painful and at the end of two months he had to give up work and was laid up forty-two days, during which time an abscess developed on the dorsum of the foot and opened in two places, which subsequently healed. He was treated by Dr. Armstead at Newman. At the end of forty-two days he resumed work with his foot still slightly swollen and painful; it has remained so up to the present illness. Patient stated that during this time (nearly four years) increased use of foot would cause an increased amount of swelling and pain and stiffness.

The patient is of medium size; fairly well nourished; face having a peculiar livid pallor or cachexia. All internal organs apparently normal; no enlargement of lymphatic glands; right foot greatly swollen, but not discolored; there were two cicatrices on the dorsum of the foot, one between the first and second metatarsal bones near the toes and one over the middle of the fourth metatarsal bone; on palpation the swelling was very hard and tense; ankle joint not involved; any attempt at movement of tarsometatarsal articulation caused pain; no areas of softening or fluctuation at present.

Blood count showed polymorph. nucleated, 65%; polymorph. eosin, 4%; small lymphocytes, 25%; large lymphocytes, 6%; number of red corpuscles, 4,090,000; number of white corpuscles, 8,000; hemoglobin, 70%.

The patient came to the S. P. Hospital April 5th and was put to bed and foot elevated; on the fourth day the foot was immobilized in a plaster cast; by the twelfth day the swelling was so reduced that the cast was loose and had to be renewed. There was still some swelling but very little pain and the patient insisted on going home; he left the hospital, but returned the same day with the foot badly swollen and painful. He was put in bed and another cast applied. This cast was removed at the end of a week and the foot was found to be swollen and edematous with a small fluctuating area over the fourth metatarsal bone. On May 1st the abscess was freely opened and considerable necrosed bone and pale granulation tissue was removed and sent to Dr. Halton. Cultures were also made from the wound; a counter opening was made to secure good drainage and the patient returned to his bed. After the operation the wound apparently was doing well for a time, and the patient likewise, but a slight evening rise of temperature persisted and the lymphatic glands in the right groin suddenly became enlarged.

I finally got the patient's consent on June 7th to have the foot amputated, which was done June 9th. At the same time the enlarged inguinal glands were removed. Patient made an uneventful recovery; gained twenty pounds before leaving the hospital on July 9, 1904. A letter received from him November 1st states he has gained ten pounds since leaving the hospital and that his general health is good.

Dr. Halton said: The lesion found in this case resembles very closely a tubercular osteitis of the bones of the foot. Every bone in the foot is involved, except the phalanges, and many of them are entirely spongy. Both the tibia and fibula also show small carious lesions. On microscopical examination the appearances are almost exactly those seen in tubercular lesions. The granulation tissue contains many larger and smaller tubercles composed of epithelioid

cells and lymphocytes, and showing caseous centers. Many large giant cells of the Langerhan's type are seen in and about the tubercles. These often contain the parasite in their bodies. The bone shows a rarifying osteitis with tubercles in the narrow spaces similar in every way to those found in the granulation tissue.

In the tissues the parasite is similar to that first described by Wernicke in 1892; and to that described by Rixford and Gilchrist in their cases of so-called "Protozoön infection," appearing in the *Johns Hopkins Hospital Reports* for 1896. The parasite has a coccidia-like appearance, being about five to twenty-five microns in diameter. It is circular in shape, having a granular protoplasmic center surrounded by a double capsule enclosing a clear refractive substance, which gives the parasite its peculiar characteristic double-contoured appearance. Reproduction is apparently carried out by endogenous sporulation. Capsules can be found containing small refractile bodies which are apparently spores. Other capsules can be seen containing a number of the young organisms. The intermediate steps between the spores and young organisms can be traced, though not very well in our specimen as it contains very few sporulating forms; but in cases in which sporulating forms were plentiful, every step in the transition has been traced by other observers.

So much for the parasite as it appears in the tissues. On culture media the appearance is very different. In culture tubes we find a mould similar to that described by Dr. Ophüls. Dr. Ophüls first discovered and demonstrated by some very interesting experiments that this parasite has a double life history, in the tissues appearing as a coccidia-like parasite, on culture media having the form of a mould. He injected guinea pigs with a pure culture of the mould, and at autopsy found only the coccidia-like parasite in the tissues. This experiment was repeated through several generations of the parasite. As far as tuberculosis is concerned, we cannot positively exclude that. It is possible that our case is one of tubercular infection with an added secondary infection with the coccidia-like parasite. Numbers of sections from our case have been stained and examined for the tubercle bacilli without finding any. The glands which Dr. Gardner spoke of having removed from the groin, apparently did not contain any of the parasites. Pieces taken from the flesh gland were incubated in culture media with out the development of any parasites. Microscopically the glands showed an acute adenitis with hyperemia, hyperplasia of the gland, and a catarrhal condition of the lymph sinus. Cultures from the foot made at this time showed the presence of staphylococcus albus, besides the mould, and we are inclined to regard the condition of the glands as due to septic absorption.

Dr. Ophüls said: If I may I should like to say a few words on this very interesting subject. It seems to me that this affection is almost entirely limited to California. There is only one case reported in literature outside of California and that one occurred at Buenos Ayres in the Argentine Republic. Lately a similar case seems to have been observed in Boston. All cases except these, so far as known, have had their origin in California, and most of them in the San Joaquin Valley. As far as the parasite is concerned, it was as Dr. Halton has said, first regarded as a protozoön. It certainly resembles protozoa in its development in the tissues so far as it propagates by endosporulation. It is, however, well known that this form of development also occurs in certain fungi, especially in yeasts. In 1900 I had an opportunity through the great courtesy of Dr. Moffitt to examine the organs of one of these cases at the City and County Hospital. The case was then thought to be one of chronic glanders, which diagnosis at the time

seemed very probable in view of the macroscopical lesions. On microscopic examination, however, I found it to be due to this form of infection. At that time Dr. Moffitt and Dr. Ash made cultures from the lesions and found in them a peculiar mold which they believed to have some relation to the parasite that I had seen in the specimens from the tissues. At the time I was not very much inclined to this view on account of theoretical considerations, which I must acknowledge misled me in the beginning. However, since this mold was obtained repeatedly in pure culture from animals inoculated with material from the lesions I concluded that it would be best to test the matter experimentally. I therefore took some of the parasites as they occurred in the tissues, put them in a drop of beef tea and watched their development under the microscope. Then it was easy to see that indeed the mold originated from the protozoön like parasites. It grew out directly from them. I made these experiments repeatedly and in later cases, so that no doubt remains that the organism really is a vegetable parasite. The parasite is rather difficult of classification. Dr. Halton already mentioned that in the culture it forms mycelia like a mold. I will show you some drawings of early stages showing that it begins as a mycelium consisting of septate more or less cylindrical branched threads. Some of these threads run into the culture medium, others from aerial hyphæ. The latter are the seat of spore formation. The manner in which the spores develop is shown in the figures. They are rows of endo-spores occurring at the end of the aerial hyphæ most frequently separated by empty spaces. Still these spaces, which resemble those which are observed between chlamydospores, are often very short. Sometimes the spores are directly adjoining, two of them being directly adjacent. At times one sees whole rows of spores without any intermediate links between them. The spores differ from the spores of ordinary oidia in, at least in the beginning, not being egg-shaped but more or less angular. The free spores, however, later often assume irregular forms and some of them may become ovoid or even spherical. As I have been able to observe it is from these spores that the protozoön like bodies develop in the tissues by direct enlargement. When brought onto fresh culture media the spores bud into more or less cylindrical threads which soon develop branches and septa make their appearance. It is of some importance that in addition to the cylindrical hyphæ and the spores one finds in old pure cultures hyphæ that resemble those which occur in cultures of certain pathogenic yeasts, that is the cells that compose them are more or less bulbous with lateral buds. The parasite in the tissues also resembles very closely the organisms described, in cases of blastomycetic dermatitis with this important difference, however, that they develop by endosporulation only and not by budding. On the whole I believe the parasite should be classified with the oidia, if we include in this group all fungi on the borderline between yeasts and molds, and as a name for it I propose until the genus is definitely established, *oidium coccidioides*, retaining in that way the name that was given to it when it was regarded as a protozoön. The lesions produced by the fungus in the tissues may resemble those of tuberculosis very closely microscopically and macroscopically so much so that I found two cases recorded as tuberculosis among my autopsy records, to be due to this infection. At other times the lesions are more acute and miliary or larger cold abscesses appear that resemble those observed in glanders. It is a well known fact, however, that such abscesses also at times occur in infections with tubercle bacilli and in places where we encounter the tubercle bacilli in pure culture. The disease was first described as a skin disease with, sometimes very late, generalization over the entire body in the form of a

disseminated miliary tuberculosis. I have seen, however, several cases of what appear to be primary pulmonary infections without cutaneous lesions at any time during the course of the disease. It attacks the adrenals, the bones and joints, and the meninges more frequently even than tuberculosis. I believe coccidioidal granuloma, a name suggested to me by Dr. Cabot of Boston, would be an appropriate name for the disease. The disease is of great interest from the standpoint of general pathology, because it shows clearly that there is nothing specific in the effect produced by the tubercle bacillus upon the tissues. It is the result of a certain degree of irritation which can be reproduced in every respect by other parasites provided they act upon the tissues similarly, which of course is not a new conception, but one that has often been the subject of very bitter controversy.

Dr. Rixford said: If this patient is cured, it is the first I have known of. The patients heretofore have generally died. This germ is a vicious thing. There were two cases originally, one of them chronic, the man living seven years; the other case was extremely acute, and the man died in some six or eight weeks. The parasites in the two cases I am not sure are the same. The first parasite was apparently like this one, the second parasite made spores in a different manner, not so numerous, separated from the periphery of the spore by clear hyaline substance. In this parasite the clear spaces were very much narrower. Whether simply collateral or a difference which might be compared to specific differences, I would not attempt to say, but the fact that one case was chronic, the other extremely acute, and all other cases where the germ was comparable to that have been chronic cases, serves to point to their being two different parasites.

Dr. Montgomery said: This is a very interesting case on account of its being in the bones entirely, with only sinuses leading out. One of Dr. Rixford's cases was in the bones. As Dr. Ophüls says it bears a strong resemblance to tuberculosis. The lesions produced by this mold resemble tuberculosis very much. In fact I first took Dr. Rixford's cases to be tuberculosis of the skin. The disease is becoming more and more prominent, especially in California. We cannot emphasize too much this resemblance to tuberculosis. It is being reported regularly as tuberculosis. Cases with these cold abscesses are especially misleading. There is one case now that will be reported shortly where almost all lesions were cold abscesses with one exception, the skin lesion on the nose. That led us to suspect that it might be a case of cold abscess due to this trouble. The disease will become more and more well known. I do not think it is known outside of California.

Dr. Rytkogel said: I had the pleasure of working on Dr. Montgomery's case. The interesting features were, first, it started out as a skin disease and wound up as a typical miliary tuberculosis of the lungs. Instead of tubercle bacilli, there were present the bodies under discussion. Dr. Ophüls did not mention that when this parasite is inoculated into guinea pigs, there is an apparent swelling of the testicle due to caseous inflammation of the tunica vaginalis. This occurs from the eighth day to the third or fourth week. In all animals that I worked with there were always, at death, numerous caseous abscesses, and in only three, one rabbit and two guinea pigs, did I succeed in producing miliary tuberculosis of the lung. In a few animals I found enlarged glands as in the case of tuberculosis. Bonetti himself did not show enlarged glands at the time of his death.

Dr. Ebright said: I would like to know more of the possible mode of infection, whether it is from the pus of patients suffering from the disease or from the parasite in the fungus formation. It is interesting to note the effect upon guinea pigs from the fresh specimens and old specimens. In all cases of

fresh inoculation the guinea pigs develop in about eight or nine days a marked swollen testicle then die with the lesion mentioned by Dr. Rytkogel. One or two I inoculated with material that had lain for a couple of months or more. We watched for two weeks and finally the testicles did swell, but there was one that did not die.

Dr. Montgomery said: It is a strange thing that in no case have we found that the infection came from a human being. For instance, with such a slow disease as leprosy, where there is one case there is another. There is a communication. In this disease there is no communication. Bonetti lived a very long time after his infection—I think it was ten years—with two sons living with him. Neither got the trouble. There is something curious about the infection.

Dr. Rytkogel: With regard to this disease not being transmitted, I do not think it is strange, the fungi were in the deeper layers of the skin and more or less fibrous tissue surrounded them. We could only inoculate from curetting and grinding the material obtained in a mortar.

The annual election of officers was held, the secretary casting the ballot for all but the secretary. Dr. Alderson was elected secretary by general ballot.

It was moved and seconded that the reports of the officers and standing committees be set aside to be read first thing at next meeting.

New business: Communication read from Nurses Alumni Association of the City and County Hospital. Moved and seconded that the president appoint a delegate to attend the proposed conference.

Notice of proposed amendment of Article V, making the dues \$10.00 a year instead of \$6.00, as at present. Adjourned 11.50 P. M.

(Note—The officers elected will be found on page 351, November JOURNAL).

PUBLICATIONS.

Transactions of the West Virginia State Medical Association, Thirty-Seventh Annual Session, May, 1904.

Proceedings of the Connecticut Medical Society, One Hundred and Twelfth Annual Convention, May, 1904. One would think Connecticut almost large enough to abandon the archaic "Annual Volume" plan and publish its transactions in journal form.

Transactions of the Arkansas Medical Society, Twenty-ninth Annual Session, May, 1904.

Transactions of the Iowa State Medical Society, Fifty-third Annual Session, 1904. Iowa seems to have a pretty good sized State Society; large enough, apparently, to warrant a change from the six-months-old-once-a-year volume to a monthly journal.

Medical Directory of New York, New Jersey and Connecticut, 1904-5. Published by the New York State Medical Association. The present volume is uniform with previous issues, though not quite so bulky. It is excellently compiled and well gotten up; it certainly is a very creditable production and we congratulate the New York Association upon it.

A General Catalogue of Medical Books; published by P. Blakistons, Son & Co., Philadelphia; price 25c. This is a very handy little volume and should be very convenient for those who have occasion to buy or use many medical books. It gives not only the works issued by this house, but medical books generally, and contains two lists; one general alphabetical and one arranged by subjects.

Practical Electro-Therapeutics. By Franklin B. Gottschalk, M. D.; published by T. Eisele, Chicago; \$3.50. This octavo of 330 pages is well published and profusely illustrated in a satisfactory manner. It seems to be up-to-date, though more space could, with advantage, have been devoted to recent work and advances in the direction of the common ground of radio-therapy and electricity.

Next Meeting State Society, Paso Robles, April 19, 20 and 21, 1904

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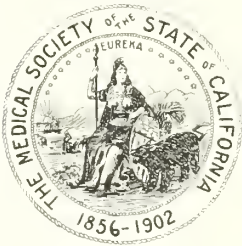
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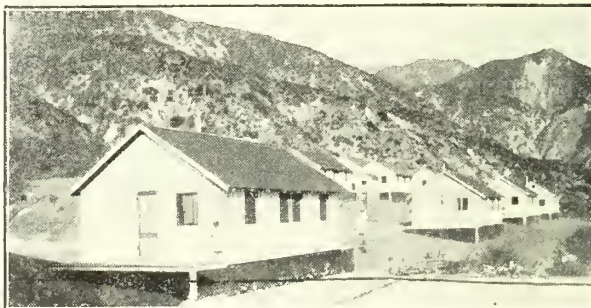
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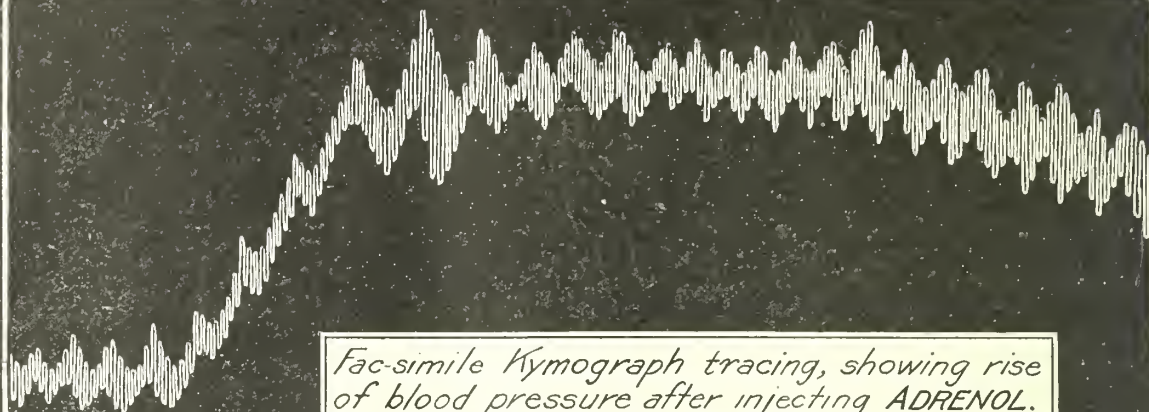
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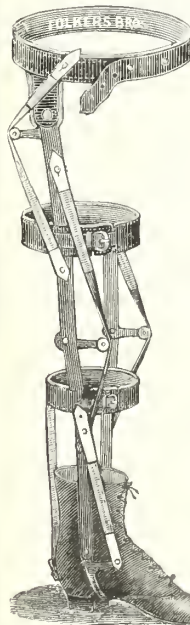
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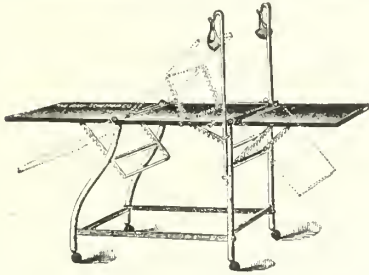
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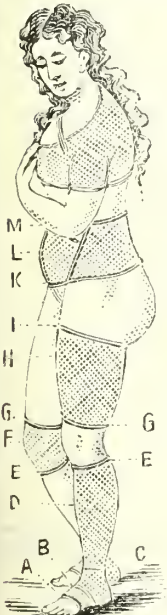
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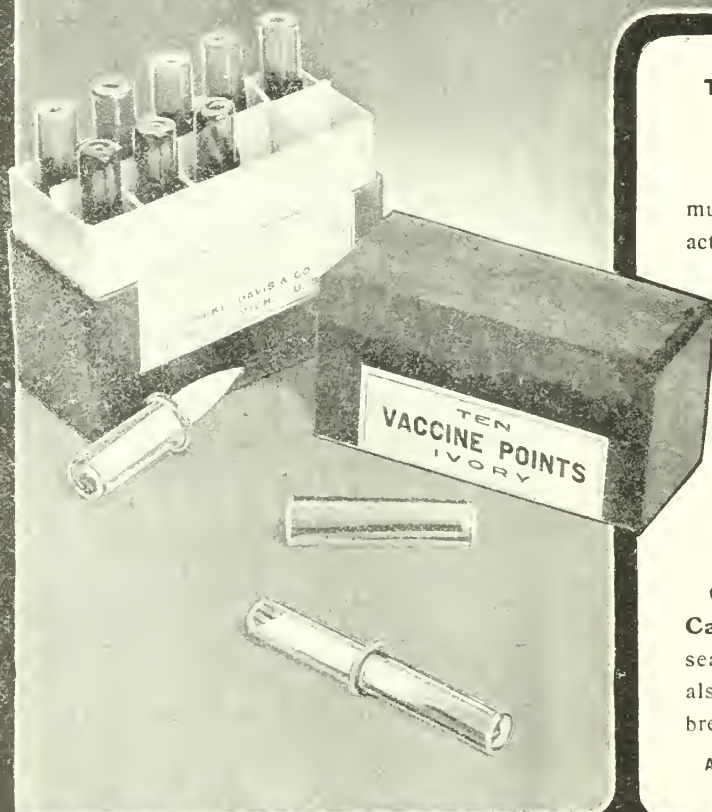
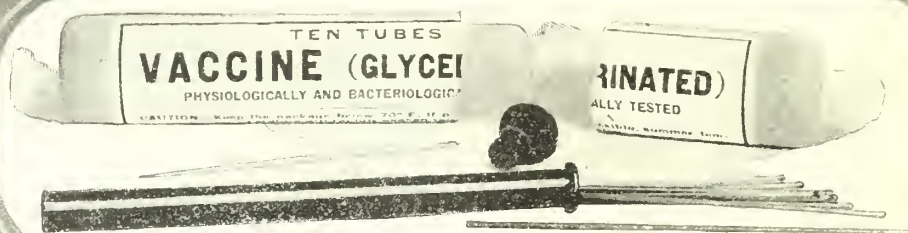
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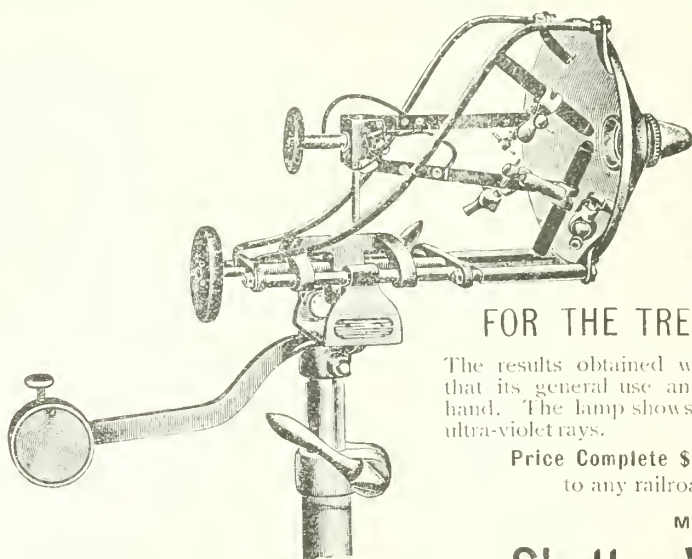
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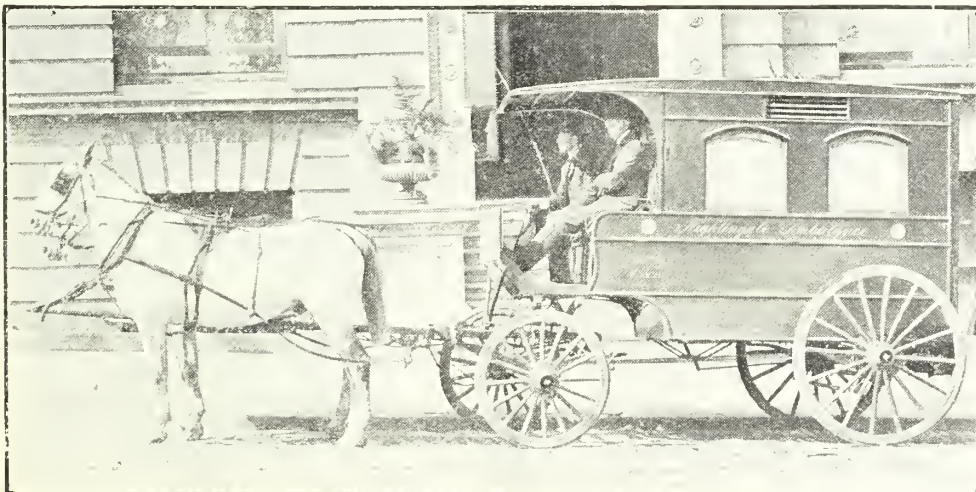
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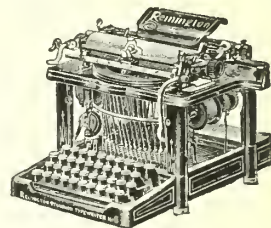
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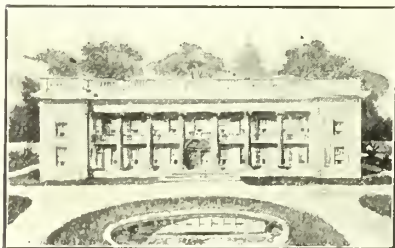
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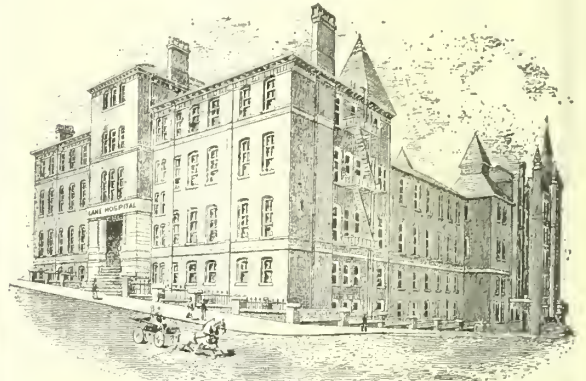
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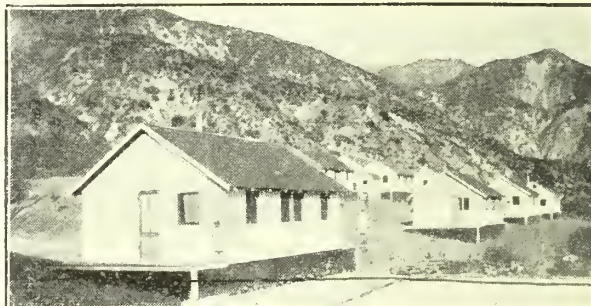
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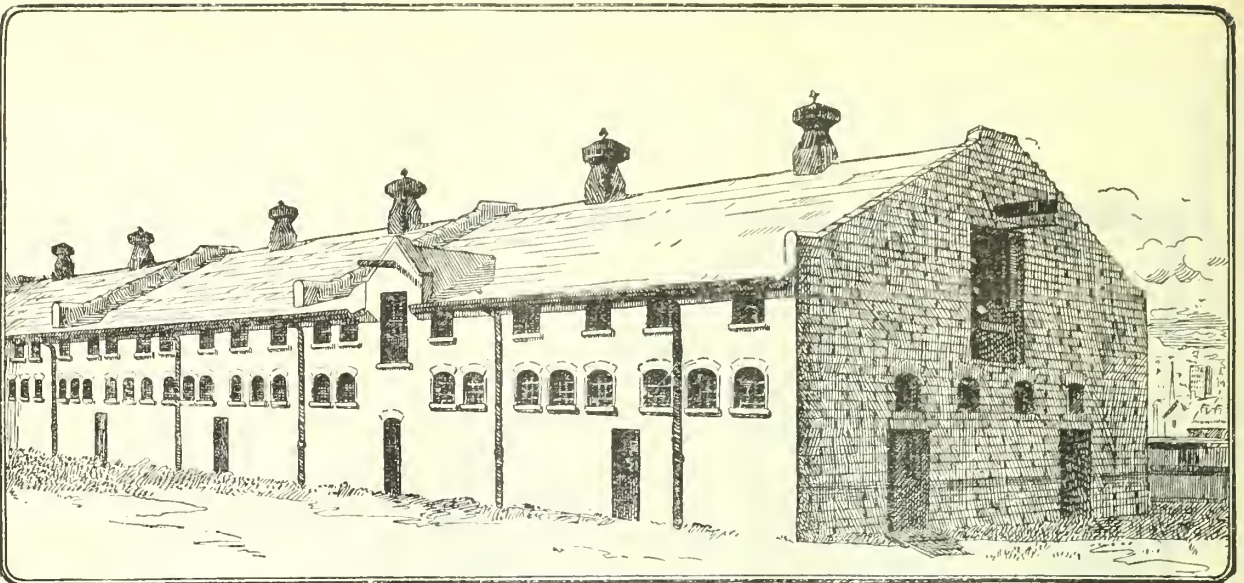
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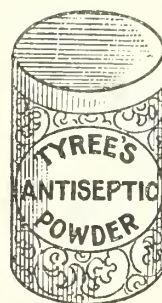


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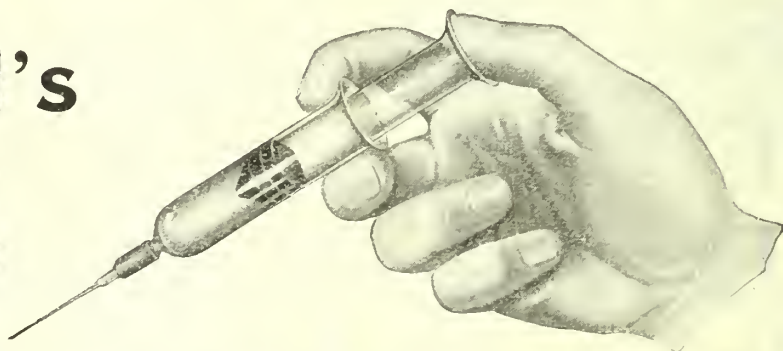
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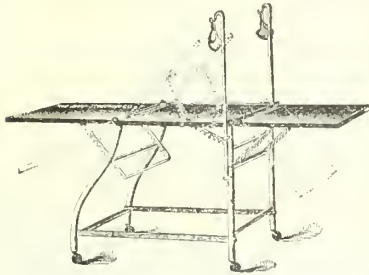
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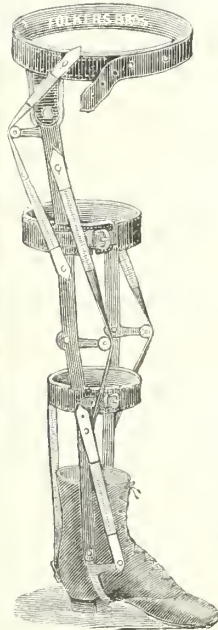
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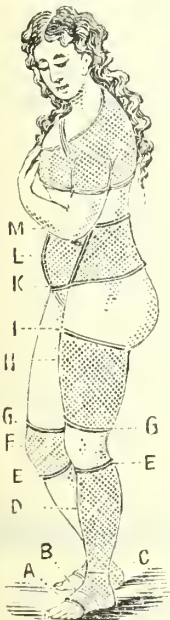


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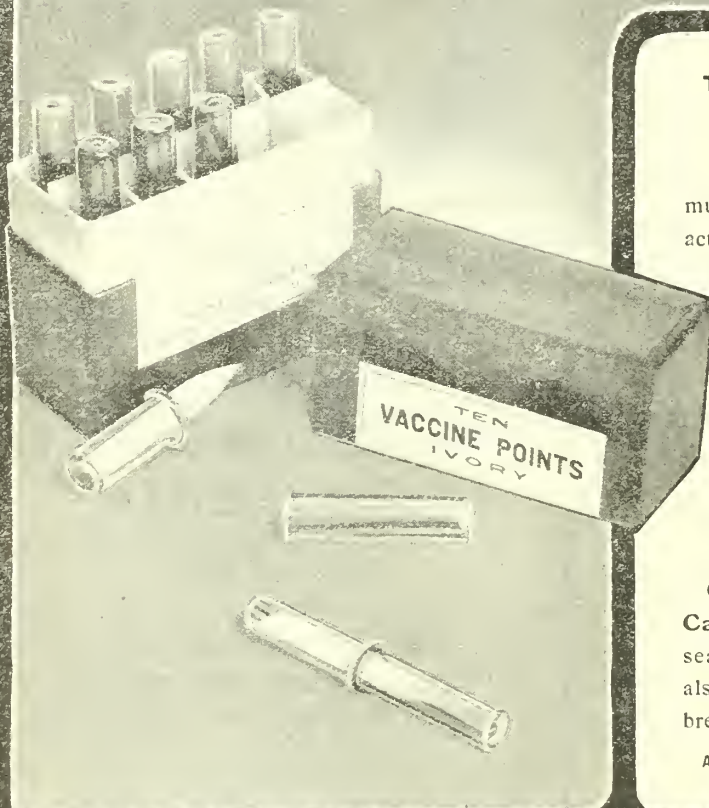
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Notice to Members of the State Society.

The Committee on Scientific Program wishes to call the attention of all members of the Society to the fact that the meeting at Paso Robles will occur but two and one-half months after the issuance of this number of the STATE JOURNAL—two and one-half months from the time this is read.

Under the present By-laws, all papers intended to be read at the meeting must be in the hands of this Committee one month before the meeting. All intending contributors are especially urged not only not to delay, *but also to hurry.*

The interests of all will be advanced if this Committee can have the papers a month and a half before the meeting.

The Chairmen of the committees, as indicated on the preceding page, are here particularly solicited to make up the program of their committee's work as soon as possible. This Committee urges Chairmen to see that the papers are strictly germane to the subjects of their committees, and are terse. This Committee has been informed by the President of the State Society that the readers of papers may have only the time allowed them by the By-laws, except by a vote of the Society, granting extension.

This Committee also requests that each paper shall be accompanied by a 100-word abstract for printing on the program. It is necessary that the program shall give a good general idea of each paper in advance, in order to draw out satisfactory and pointed discussions.

This Committee is confident that all papers planned to be read are even now blocked out mentally by the writers, or are in skeleton form, and need only to be completed. This is the dangerous time in a paper's birth; writers always feel that but a little time will really be needed for completion. But this Committee knows the danger of the period, and again urges diligence. *Finish the papers at once and send them to the Chairman of the Committee as soon as possible.*

HARRY M. SHERMAN, Chairman,
1303 Van Ness Avenue,
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To County Society Secretaries.

The Memorial Committee would respectfully urge the Secretaries of all County Societies to furnish it with data from which biographical sketches may be prepared of members who have died during the Society year—April to April.

It is practically impossible for the Committee to gather this data without the co-operation of members generally, but more especially the Secretaries, and in order to make the report accurate and to present fitting tribute to our brethren who have passed away, we appeal to the Secretaries to furnish the information fully and promptly.

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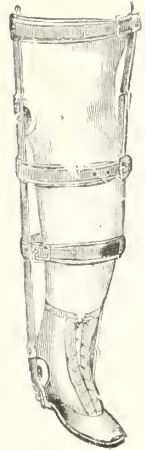
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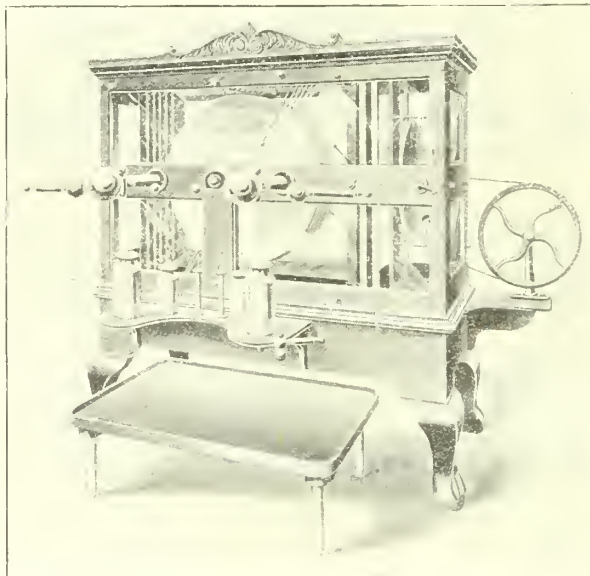
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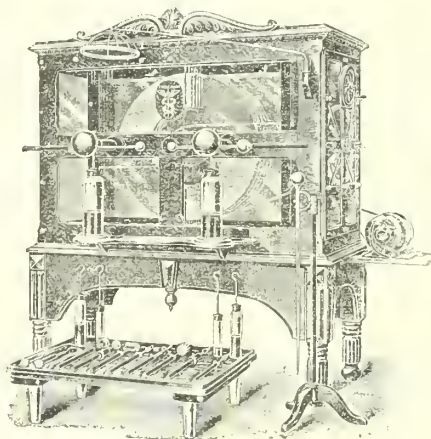
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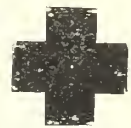
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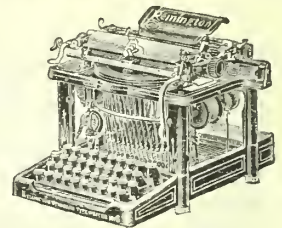
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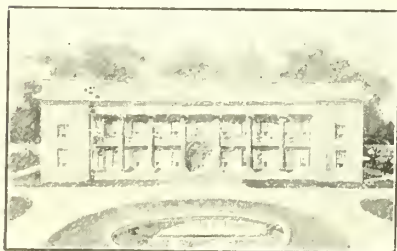
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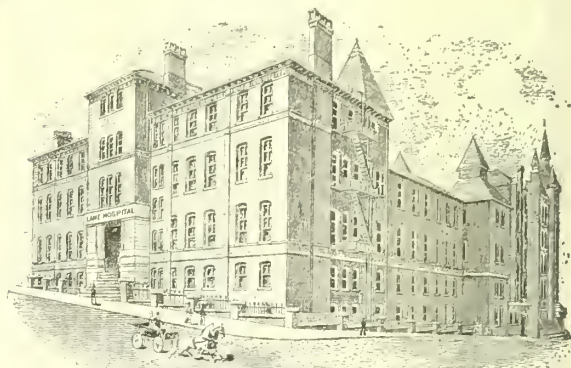
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CALIFORNIA State Journal of Medicine

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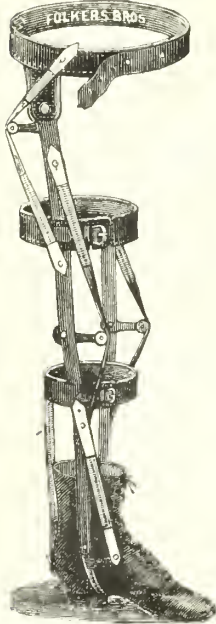
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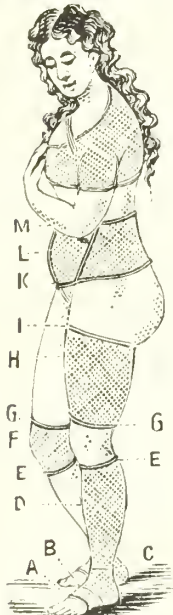


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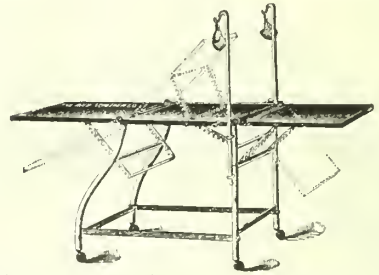
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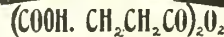
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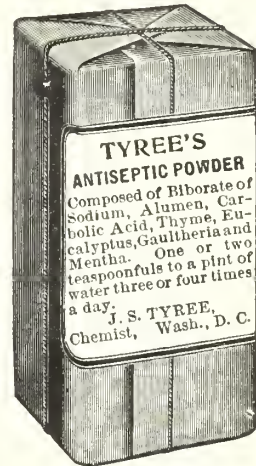
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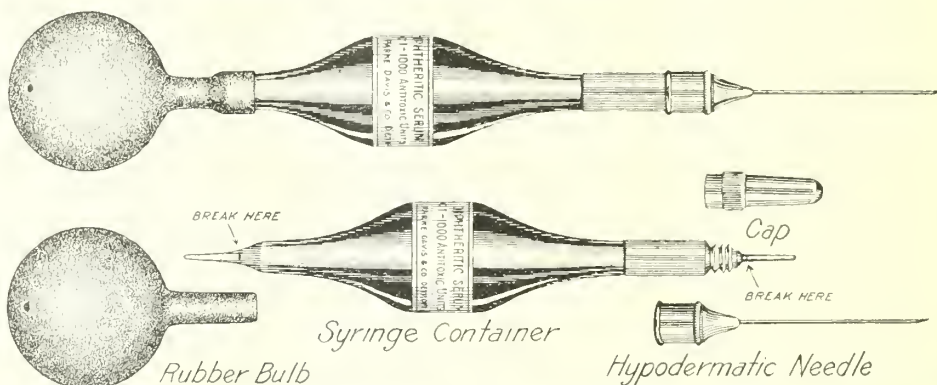
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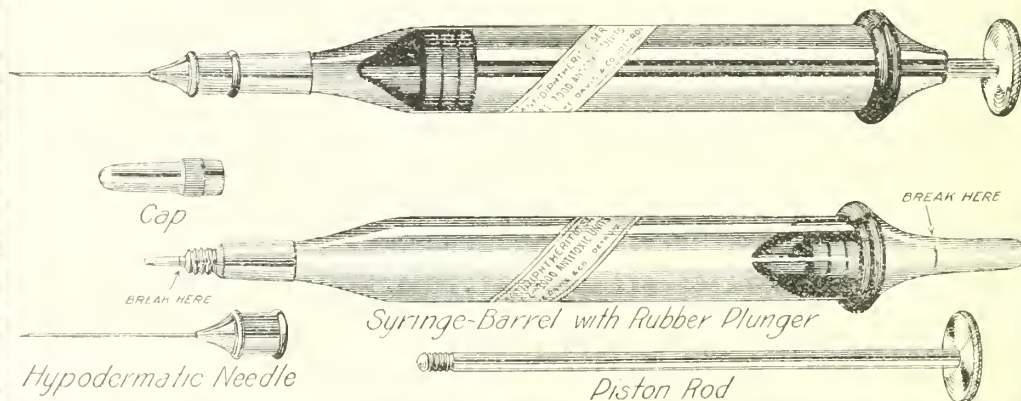
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Notice to Members of the State Society.

The Committee on Scientific Program wishes to call the attention of all members of the Society to the fact that the meeting at Paso Robles will occur but two and one-half months after the issuance of this number of the STATE JOURNAL—two and one-half months from the time this is read.

Under the present By-laws, all papers intended to be read at the meeting must be in the hands of this Committee one month before the meeting. All intending contributors are especially urged not only not to delay, *but also to hurry.*

The interests of all will be advanced if this Committee can have the papers a month and a half before the meeting.

The Chairmen of the committees, as indicated on the preceding page, are here particularly solicited to make up the program of their committee's work as soon as possible. This Committee urges Chairmen to see that the papers are strictly germane to the subjects of their committees, and are terse. This Committee has been informed by the President of the State Society that the readers of papers may have only the time allowed them by the By-laws, except by a vote of the Society, granting extension.

This Committee also requests that each paper shall be accompanied by a 100-word abstract for printing on the program. It is necessary that the program shall give a good general idea of each paper in advance, in order to draw out satisfactory and pointed discussions.

This Committee is confident that all papers planned to be read are even now blocked out mentally by the writers, or are in skeleton form, and need only to be completed. This is the dangerous time in a paper's birth; writers always feel that but a little time will really be needed for completion. But this Committee knows the danger of the period, and again urges diligence. *Finish the papers at once and send them to the Chairman of the Committee as soon as possible.*

HARRY M. SHERMAN, Chairman,
1303 Van Ness Avenue,
San Francisco.

To County Society Secretaries.

The Memorial Committee would respectfully urge the Secretaries of all County Societies to furnish it with data from which biographical sketches may be prepared of members who have died during the Society year—April to April.

It is practically impossible for the Committee to gather this data without the co-operation of members generally, but more especially the Secretaries, and in order to make the report accurate and to present fitting tribute to our brethren who have passed away, we appeal to the Secretaries to furnish the information fully and promptly.

J. LAMBERT ASAY, Chairman,
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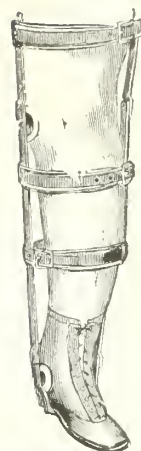
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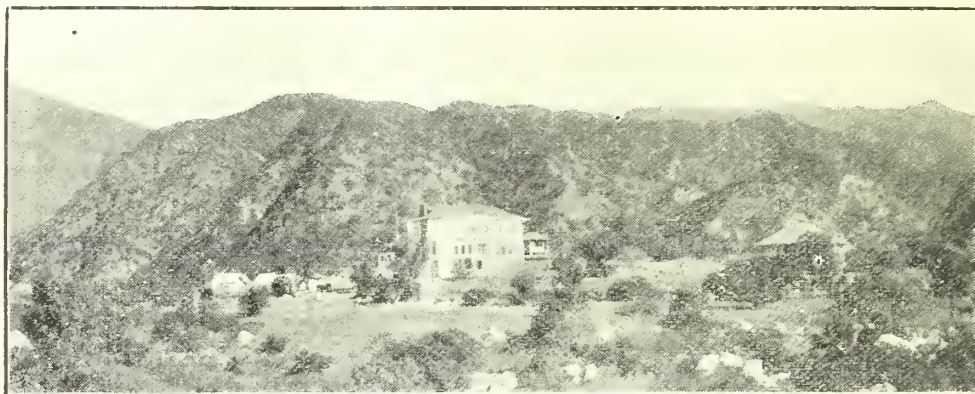
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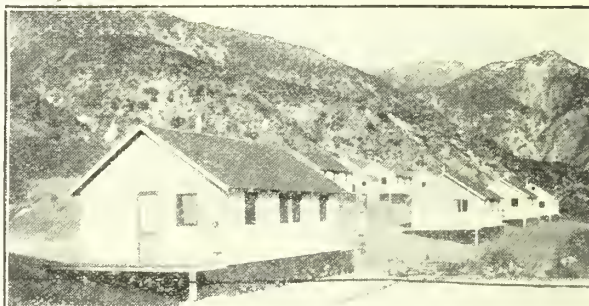
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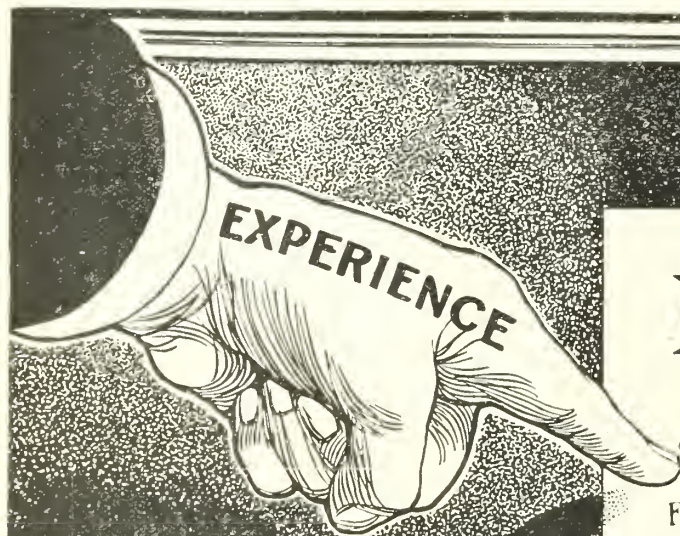
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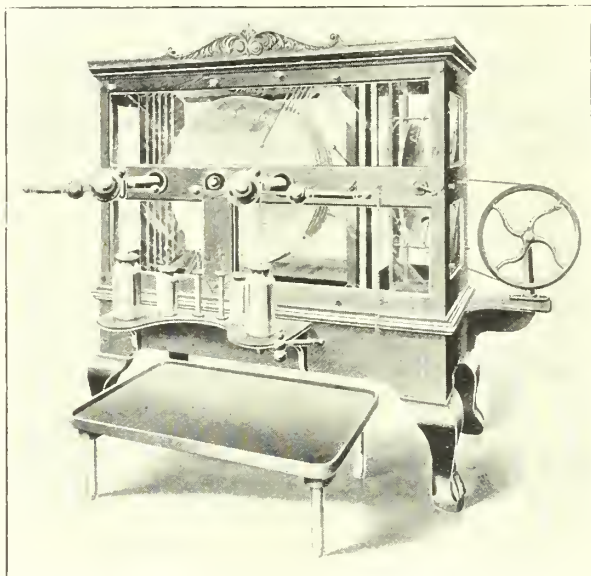
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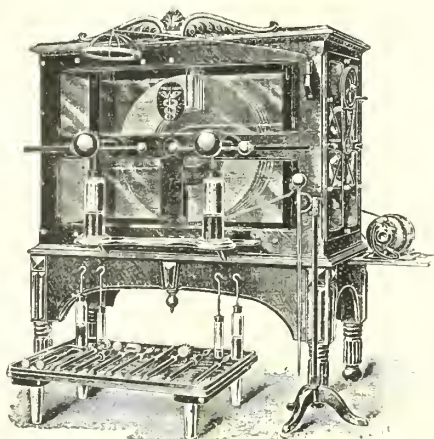
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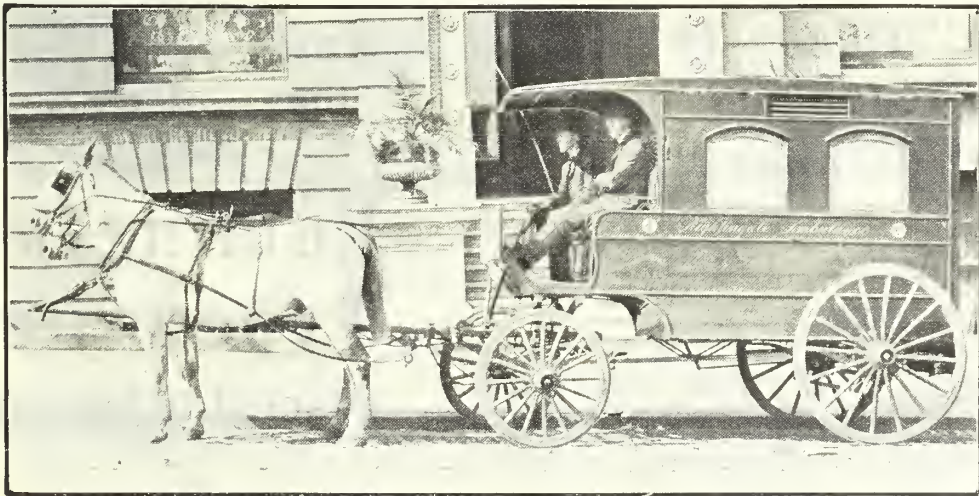
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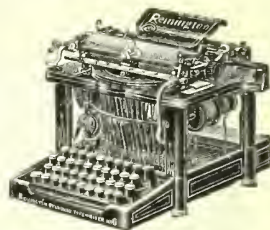
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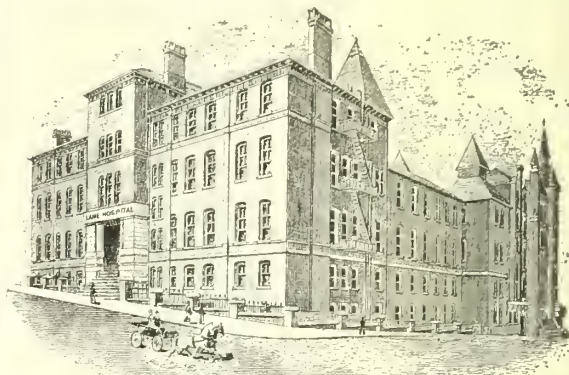
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APRIL, 1904

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reduced after inversion, per litre	68.80
Sulphate of potassium, in grams, per litre	0.91
Tartrate, in grams, per litre	1.85
Ash	2 24
Acid, calculated as sulphuric	3 13
Acid sulphurous	none
Acid salicylic	none
Saccharin	none
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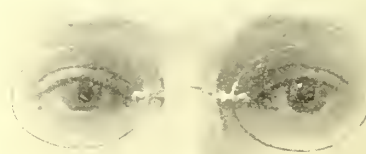
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CALIFORNIA COUNTY MEDICAL SOCIETIES.

NAME	PRESIDENT	SECRETARY	MEETS
Alameda County Med. Association.....	Jeremiah Maher, Oakland.....	A. H. Pratt, Oakland.....	Second Tuesday
Butte County Medical Society.....	O. Stansbury, Chico.....	D. H. Moulton, Chico.....	First and third Friday
Contra Costa Medical Society.....	J. T. Brenneman, Martinez.....	J. S. Riley, Port Costa.....	First Monday, F. O. M.
Fresno County Medical Society.....	Geo. A. Hare, Fresno.....	Angus B. Cowan, Fresno.....	First Tuesday
Humboldt County Med. Society.....	G. W. McKinnon, Arcata.....	G. N. Drysdale, Eureka.....	Second Tuesday
Kern County Medical Society.....	T. W. Helm, Bakersfield.....	Wm. S. Fowler, Bakersfield.....	Second Monday
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	First and third Friday
Los Angeles County Med. Society.....	W. W. Beckett, Los Angeles.....	Jos. M. King, Los Angeles.....	First Saturday
Marin County Medical Society.....	W. J. Wickman, San Rafael.....	W. F. Jones, San Rafael.....	Quarterly
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	C. A. Poage, Hopland.....	First Thursday
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	First Saturday
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Dorus Brumwell, King City.....	Quarterly
Napa County Medical Society.....	Elmer E. Stone, Napa.....	J. L. Arbogast, St. Helena.....	Second Tuesday
Orange County Medical Assn.....	Wm. Freeman, Fullerton.....	H. S. Gordon, Santa Ana.....	March '04
Placer County Medical Society.....	Chas. H. Bulson, Lincoln.....	R. F. Rooney, Auburn.....	Third Tuesday
Riverside County Medical Society.....	C. W. Girdlestone, Riverside.....	H. R. Martin, Riverside.....	Third Tuesday
Sacramento Society for Med. Imp.....	Thos. Ross, Sacramento.....	J. W. James, Sacramento.....	First Monday
San Benito County Medical Society.....	James H. Tebbetts, Hollister.....	J. M. O'Donnell, Hollister.....	Second Wednesday
San Bernardino Medical Assn.....	James P. Booth, Needles.....	J. H. Meyer, San Bernardino.....	First Friday
San Diego County Medical Society.....	Fred Baker, San Diego.....	T. L. Magee, San Diego.....	Second Tuesday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	Wm. F. Barbat, San Francisco.....	Last Friday
San Joaquin County Med. Society.....	F. R. Clark, Stockton.....	W. S. Suedigar, Stockton.....	Third Wednesday
San Luis Obispo County Med. Soc.....	S. J. Jackson, San Luis Obispo.....	E. A. Dial, San Luis Obispo.....	Quarterly
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	W. B. Cummane, Santa Barbara.....	Second Thursday
Santa Clara County Med. Society.....	W. T. McNary, San Jose.....	J. Lambert Asay, San Jose.....	Quarterly
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	Saxton T. Pope, Watsonville.....	Quarterly
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	R. F. Wallace, Redding.....	Second Thursday
Sonoma County Medical Society.....	J. W. Jesse, Santa Rosa.....	G. W. Mallory, Santa Rosa.....	First Monday
Tri-County Medical Society.....	P. K. Watters, Watsonville.....	S. T. Pope, Watsonville.....	Quarterly
Ventura County Medical Society.....	J. H. Love, Ventura.....	A. A. Maulhardt, Oxnard.....	First Monday
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	F. R. Fairchilds, Woodland.....	Quarterly
Yuba and Sutter Cos. Medical Soc.....	J. H. Barr, Marysville.....	G. W. Stratton, Marysville.....	Quarterly

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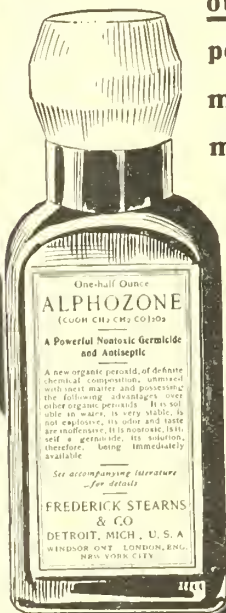
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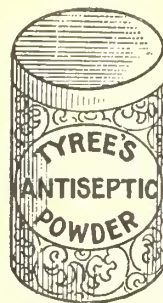
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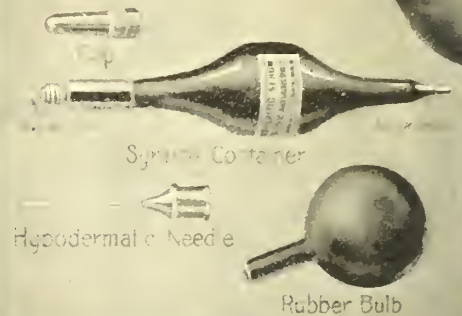
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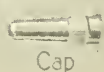
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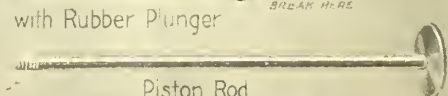
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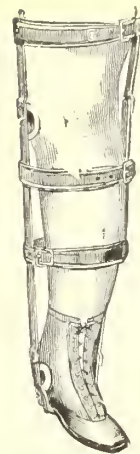
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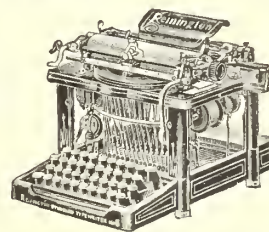
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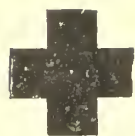


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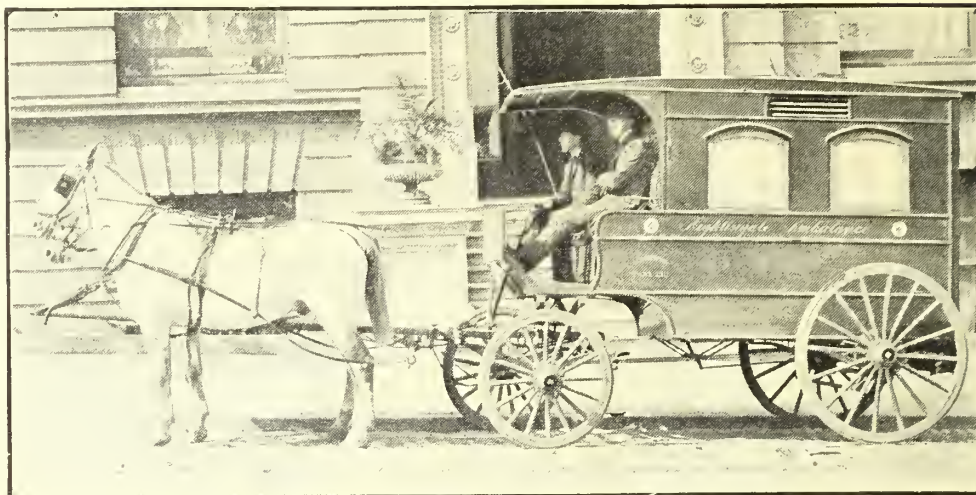
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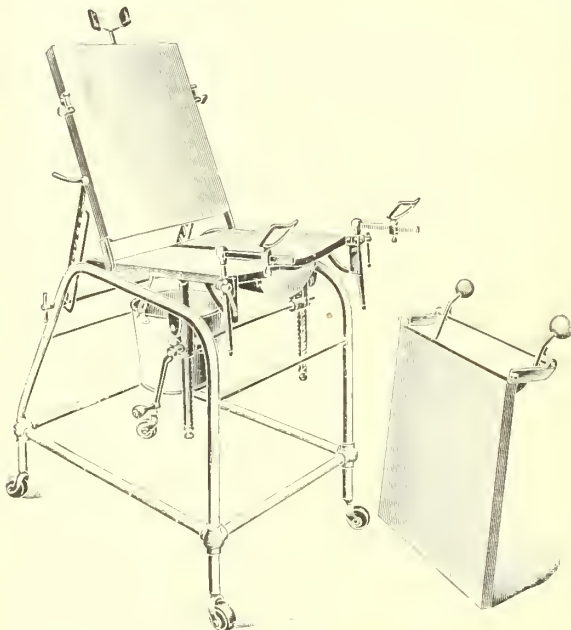
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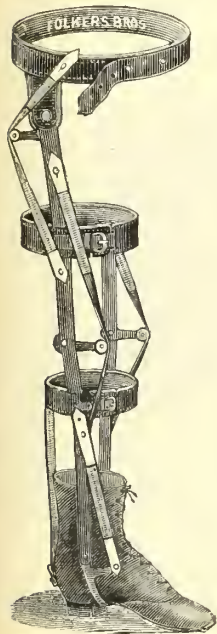
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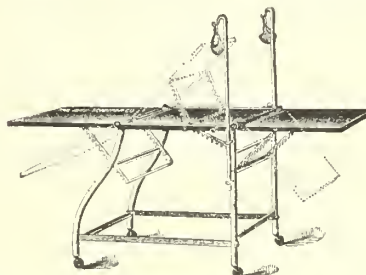
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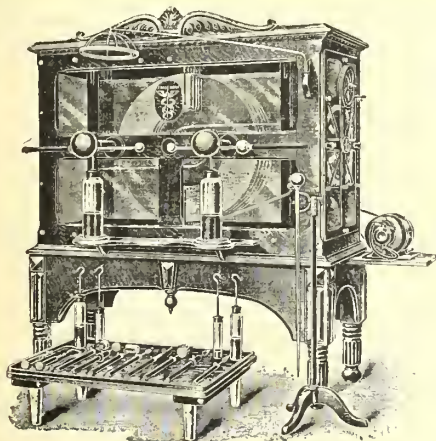
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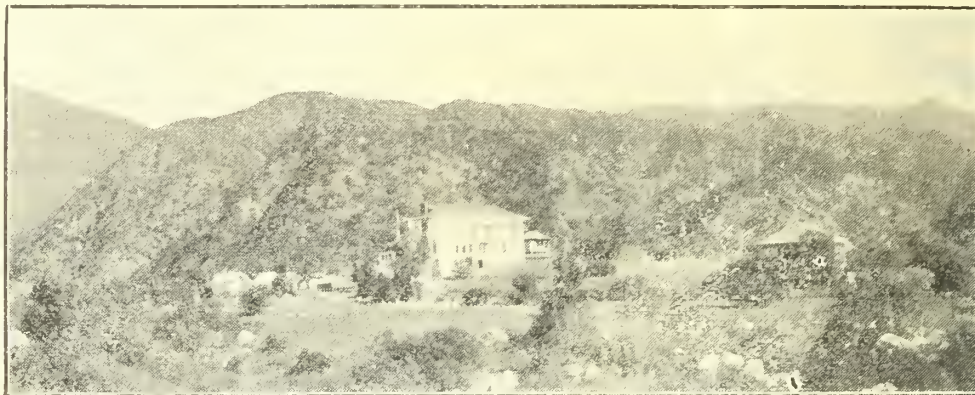
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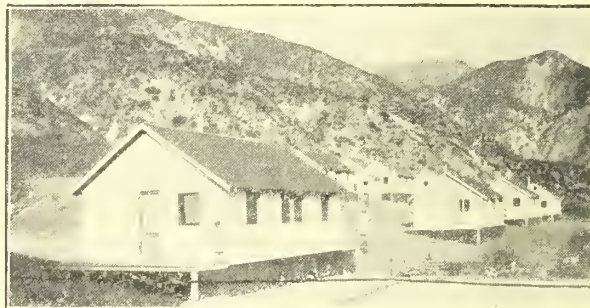
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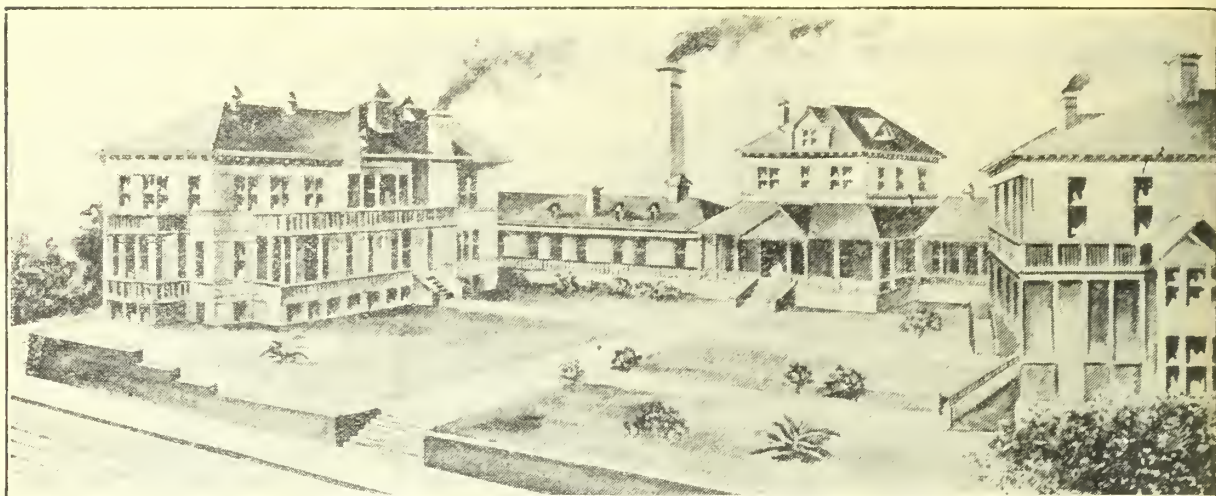
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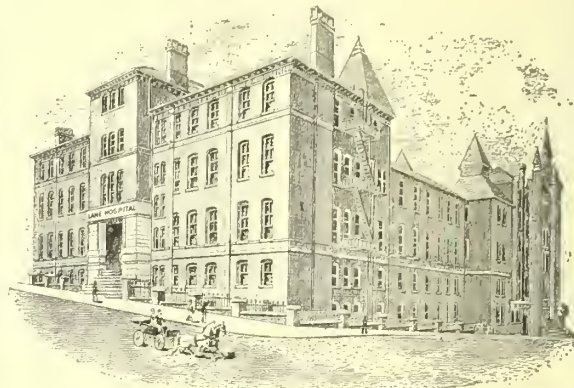
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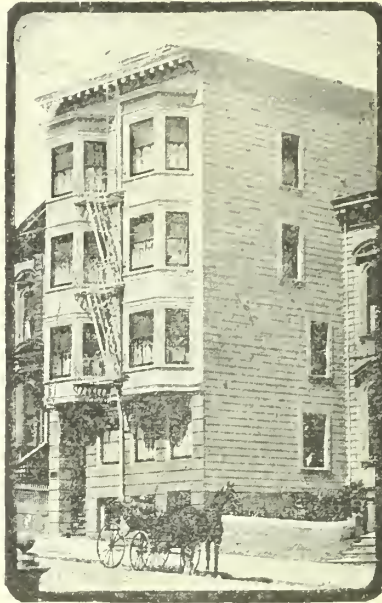
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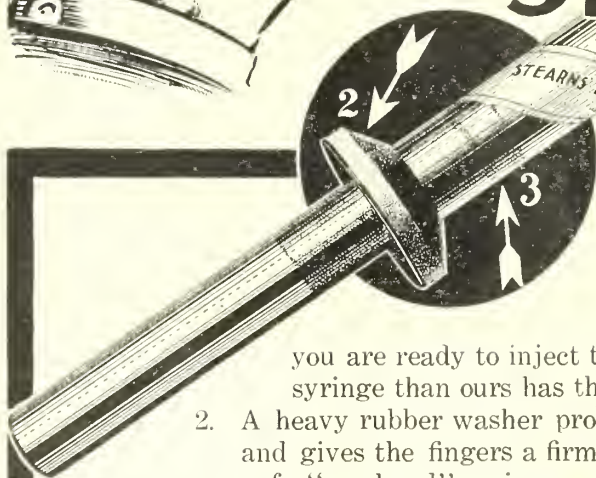
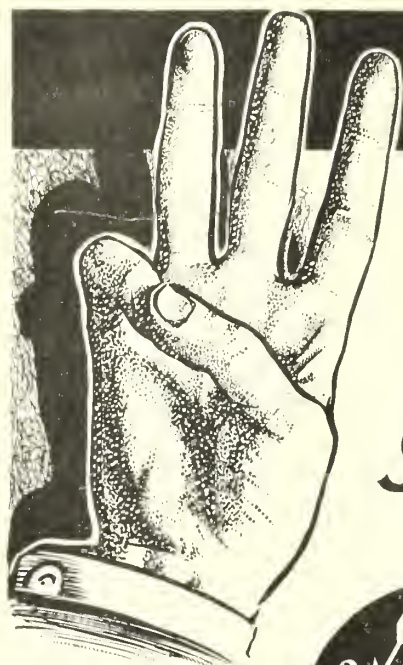
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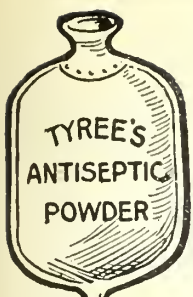
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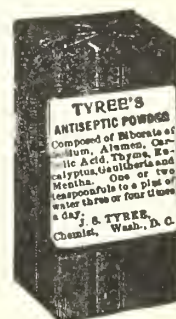
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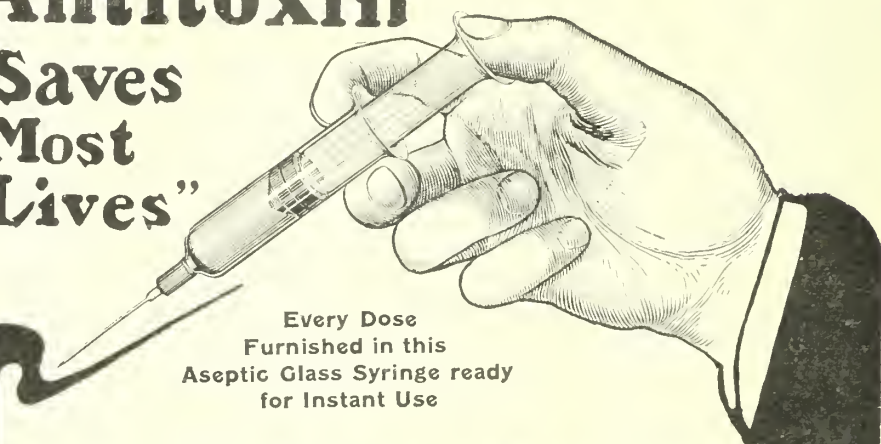
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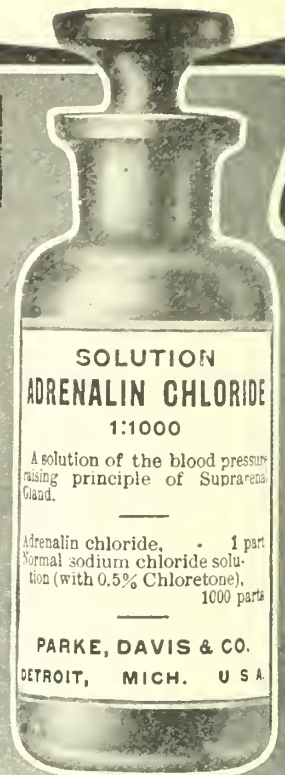
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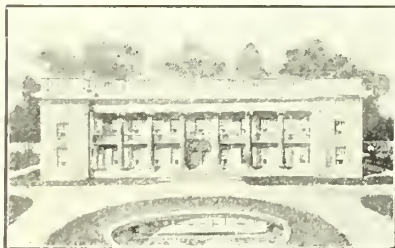
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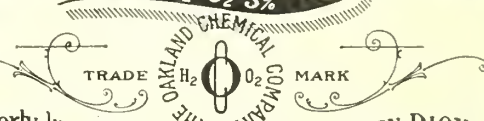
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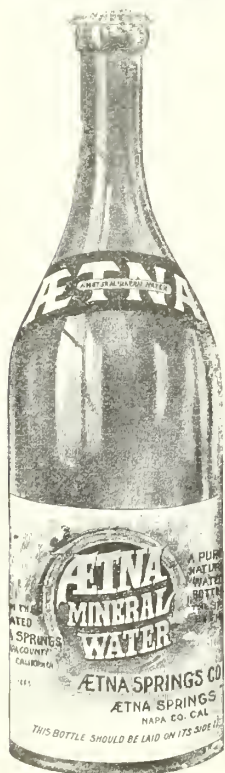
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Lithium (with spectroscope).....	traces
Calcium Carbonic (dissolved in Carbonic Acid).....	30.111
Calcium Phosphate.....	.194
Calcium Sulphate.....	.626
Barium Carbonate (dissolved in Carbonic Acid).....	.054
Strontrum (with spectro-scope).....	none
Magnesium Carbonate (dissolved in Carbonic Acid).....	6.620
Iron Compounds.....	traces
Boracic Acid (with spectro-scope).....	traces
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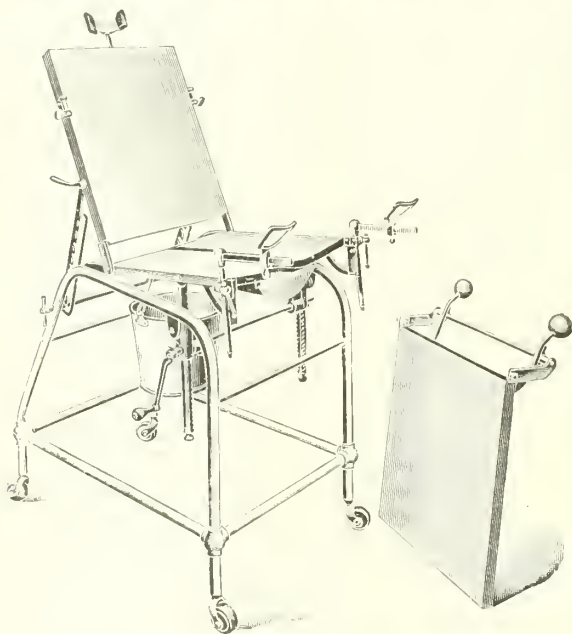
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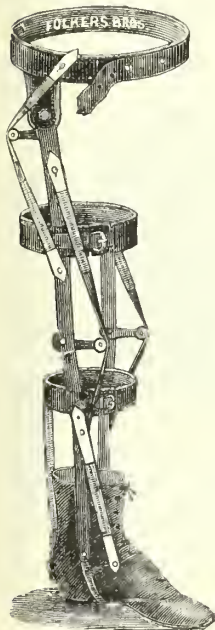
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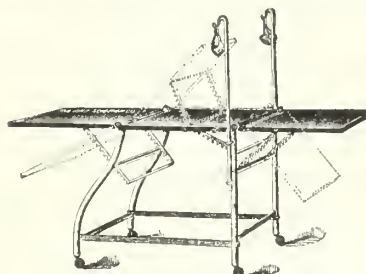
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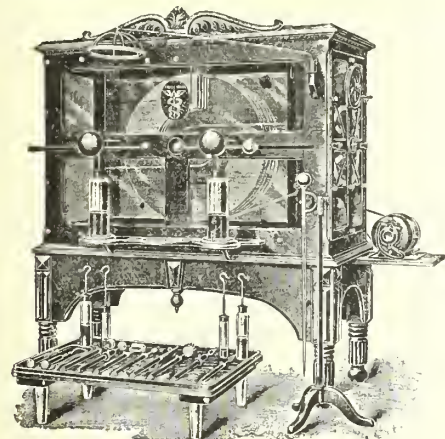
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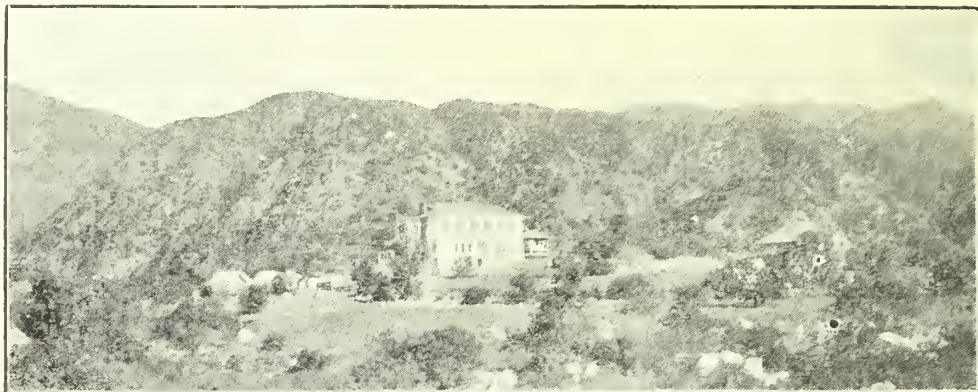
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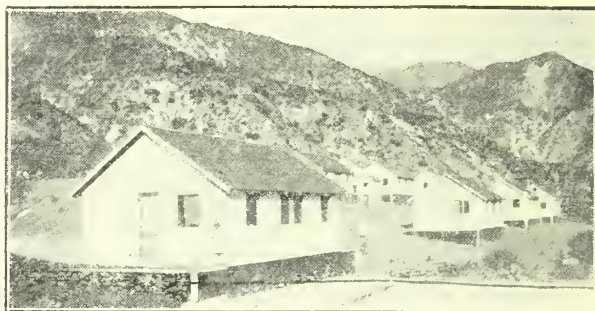
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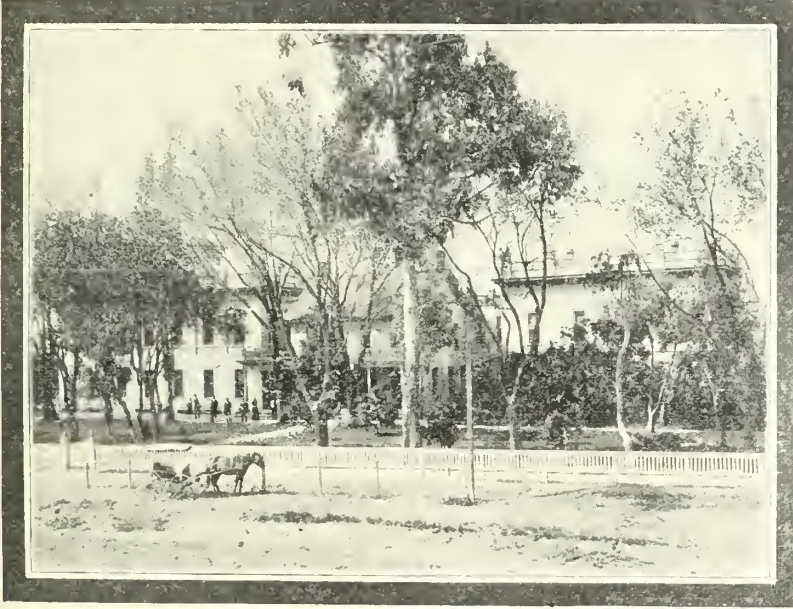


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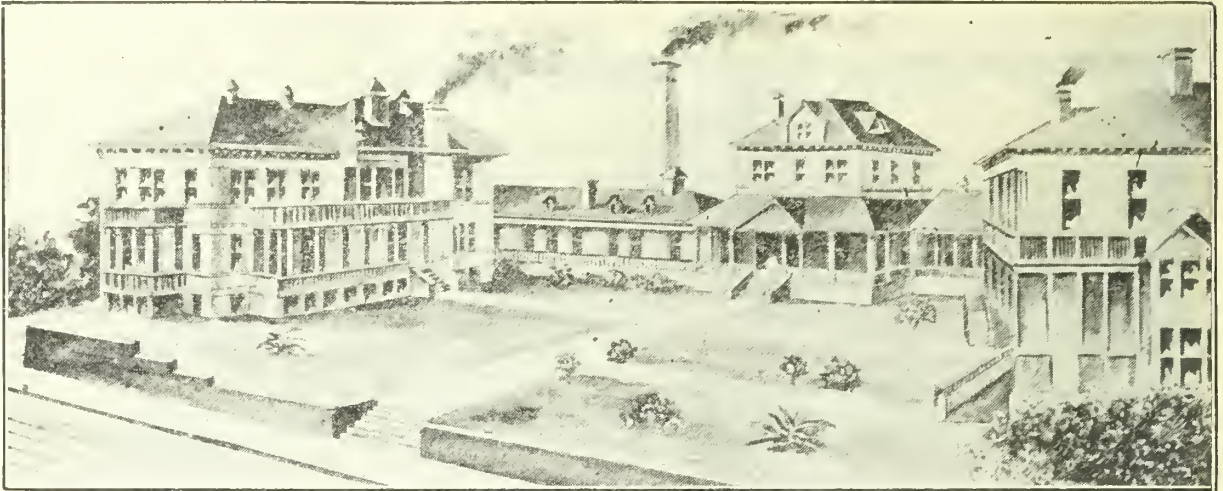
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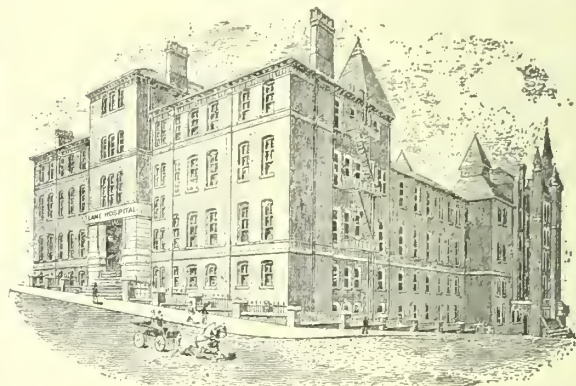
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VOL. II, No. 6

JUNE, 1904

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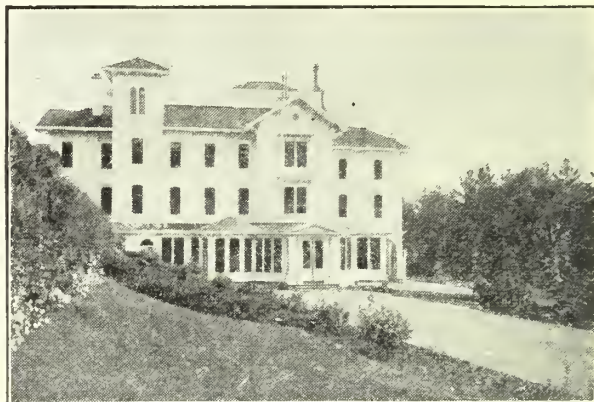
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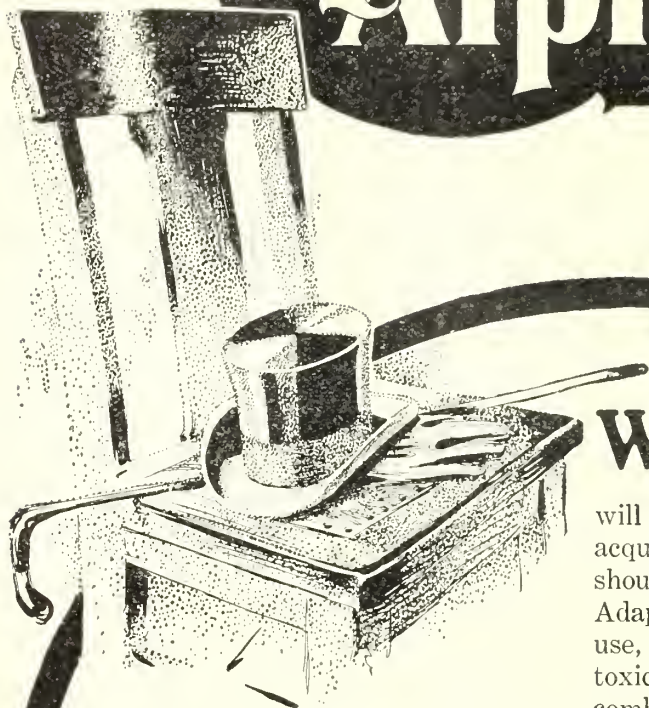
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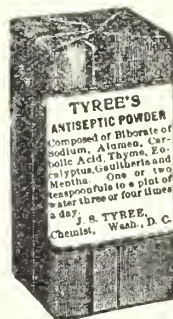
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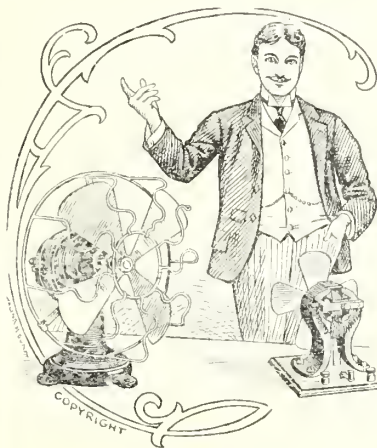
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NAME	PRESIDENT	SECRETARY	MEETS
Alameda County Med. Association.....	Jeremiah Maher, Oakland.....	A. H. Pratt, Oakland.....	Second Tuesday
Butte County Medical Society.....	O. Stansbury, Chico.....	D. H. Moulton, Chico.....	
Contra Costa Medical Society.....	J. T. Brenneman, Martinez.....	J. S. Riley, Port Costa.....	First Monday, E. O. M.
Fresno County Medical Society.....	Geo. A. Hare, Fresno.....	Angus B. Cowan, Fresno.....	First Tuesday
Humboldt County Med. Society.....	G. W. McKinnon, Arcata.....	G. N. Drysdale, Eureka.....	Second Tuesday
Kern County Medical Society.....	T. W. Helm, Bakersfield.....	Wm. S. Fowler, Bakersfield.....	
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	Second Monday
Los Angeles County Med. Society.....	W. W. Beckett, Los Angeles.....	Jos. M. King, Los Angeles.....	First and third Friday
Marin County Medical Society.....	W. F. Jones, San Rafael.....	W. J. Wickman, San Rafael.....	First Saturday
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	W. N. Moore, Ukiah.....	Quarterly
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	First Thursday
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Dorus Brumwell, King City.....	First Saturday
Napa County Medical Society.....	Elmer E. Stone, Napa.....	J. L. Arbogast, St. Helena.....	Quarterly
Orange County Medical Assn.....	F. E. Wilson, Westminster.....	H. S. Gordon, Santa Ana.....	Second Tuesday
Placer County Medical Society.....	Thomas M. Todd, East Auburn.....	R. F. Rooney, Auburn.....	March '04
Riverside County Medical Society.....	C. W. Girdlestone, Riverside.....	H. R. Martin, Riverside.....	Third Tuesday
Sacramento Society for Med. Imp.....	A. M. Henderson, Sacramento.....	J. W. James, Sacramento.....	Third Tuesday
San Bernardino Medical Assn.....	James P. Booth, Needles.....	J. M. O'Donnell, Hollister.....	First Monday
San Diego County Medical Society.....	Fred Baker, San Diego.....	J. H. Meyer, San Bernardino.....	Second Wednesday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	T. L. Magee, San Diego.....	First Friday
San Joaquin County Med. Society.....	D. F. Ray, Stockton.....	Wm. F. Barbat, San Francisco.....	Second Tuesday
San Luis Obispo County Med. Soc.....	J. S. Jackson, San Luis Obispo.....	Barton J. Powell, Stockton.....	Last Friday
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	J. J. Knowlton, San Luis Obispo.....	
Santa Clara County Med. Society.....	W. T. McNary, San Jose.....	W. B. Cunnane, Santa Barbara.....	
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	J. Lambert Asay, San Jose.....	Third Wednesday
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	Saxton T. Pope, Watsonville.....	Quarterly
Sonoma County Medical Society.....	J. H. Love, Ventura.....	R. F. Wallace, Redding.....	Quarterly
Tri-County Medical Society.....	P. K. Watters, Watsonville.....	G. W. Mallory, Santa Rosa.....	Second Thursday
Ventura County Medical Society.....	J. H. Love, Ventura.....	S. T. Pope, Watsonville.....	
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	A. A. Maulhardt, Oxnard.....	First Monday
Yuba and Sutter Cos. Medical Soc.....	J. H. Barr, Marysville.....	F. R. Fairchilds, Woodland.....	
		G. W. Stratton, Marysville.....	Quarterly

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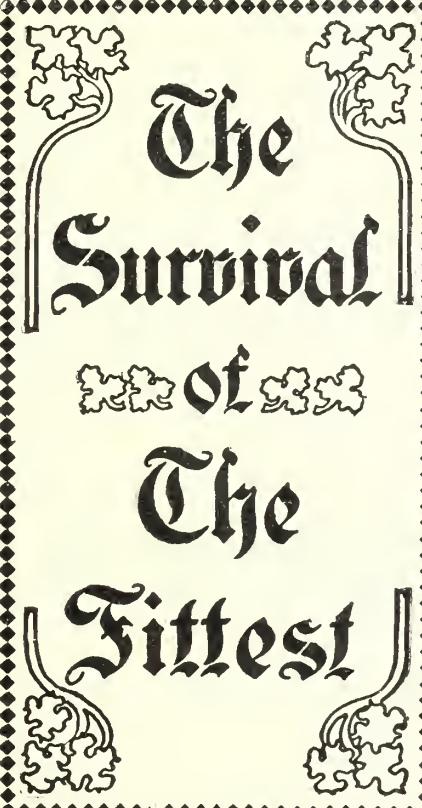
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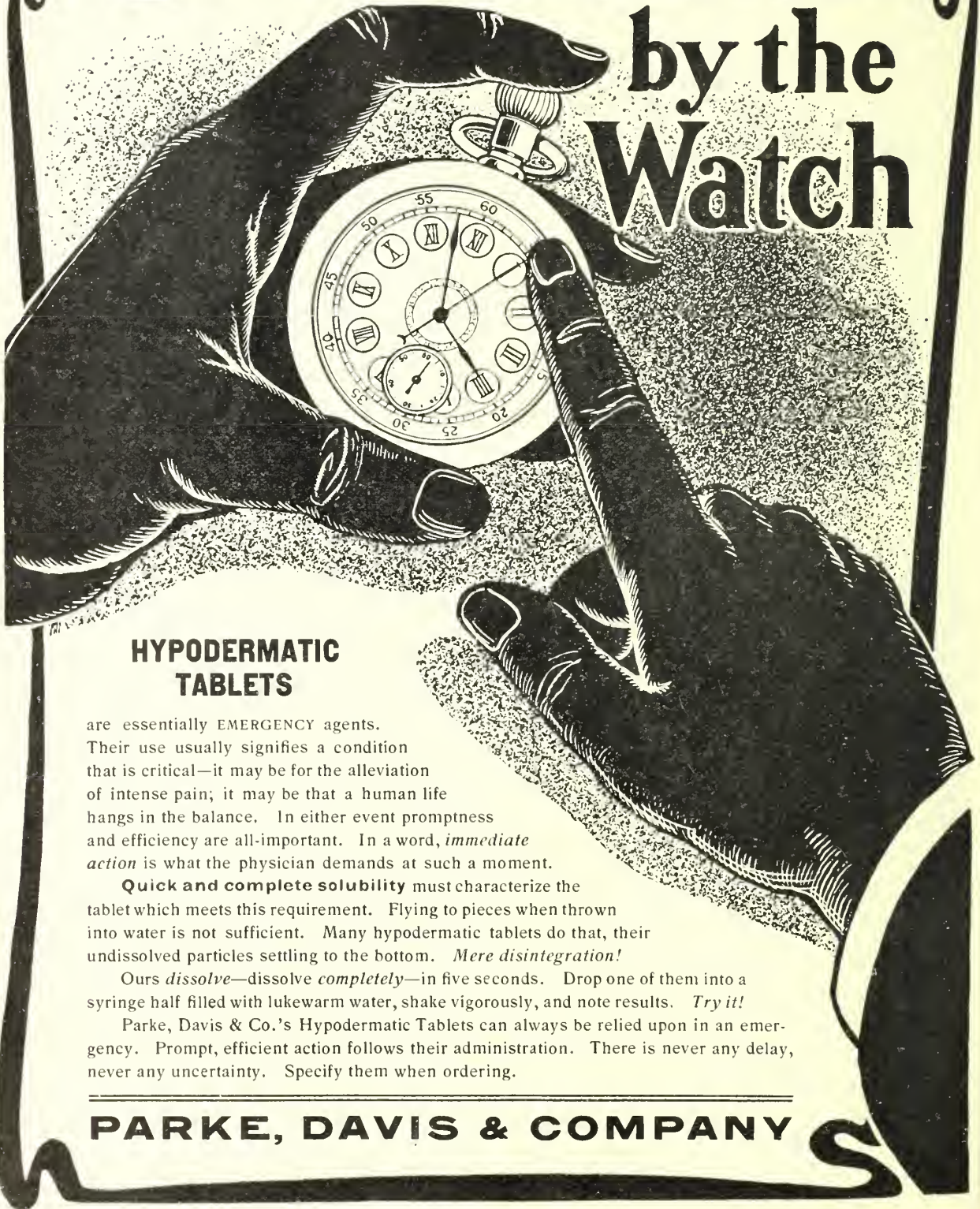
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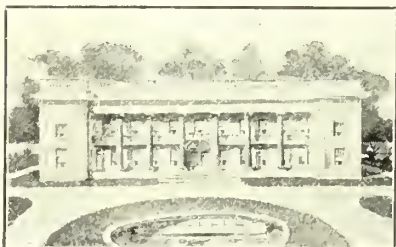
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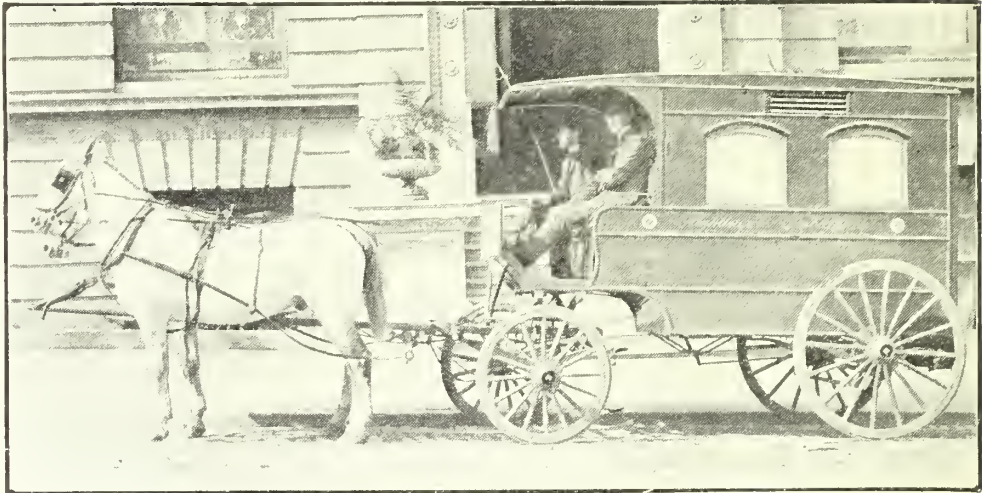
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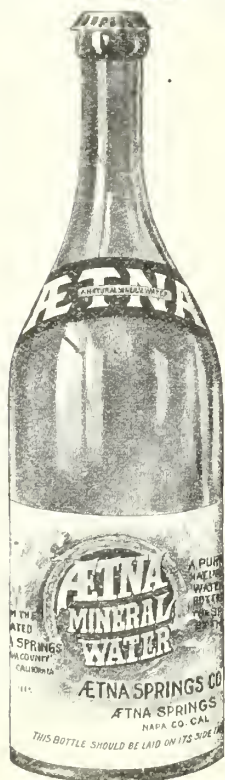
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Bicarbonate of Soda.....	12.796	18.348	21.763	22.100	24.080
Bicarbonate of Potash.....	0.489	0.770	0.544	0.803	1.466
Bicarbonate of Lime.....	52.045	57.302	50.411	77.750	73.270
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Sodium Chloride.....	.500
Sodium Bi-Carbonate.....	1.055
Lithium (with spectroscope).....	traces
Calcium Carbonic (dissolved in Carbonic Acid).....	30.141
Calcium Phosphate.....	.494
Calcium Sulphate.....	.626
Barium Carbonate (dissolved in Carbonic Acid).....	.054
Strontium (with spectro-scope).....	none
Magnesium Carbonate (dissolved in Carbonic Acid).....	6.620
Iron Compounds.....	traces
Boric Acid (with spectro-scope).....	traces
Organic matter.....	traces
Total.....	43.349

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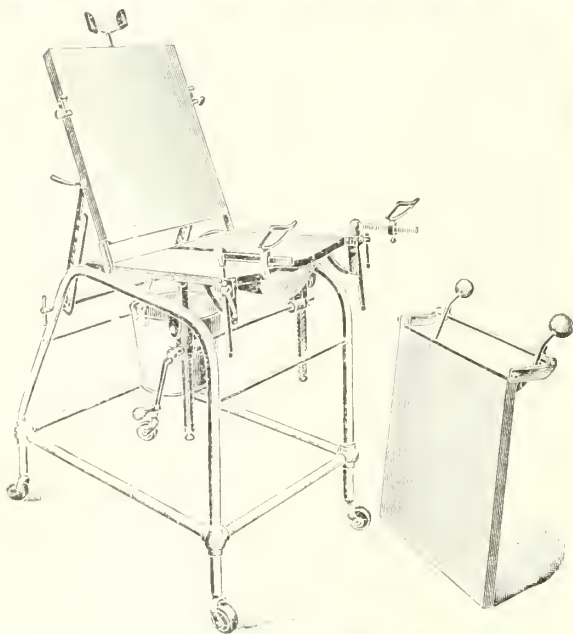
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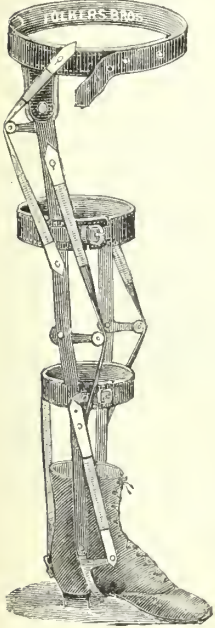
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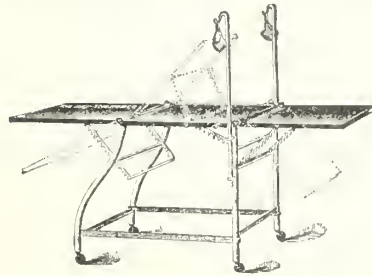
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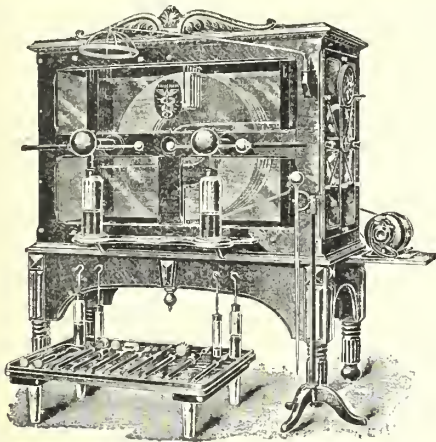


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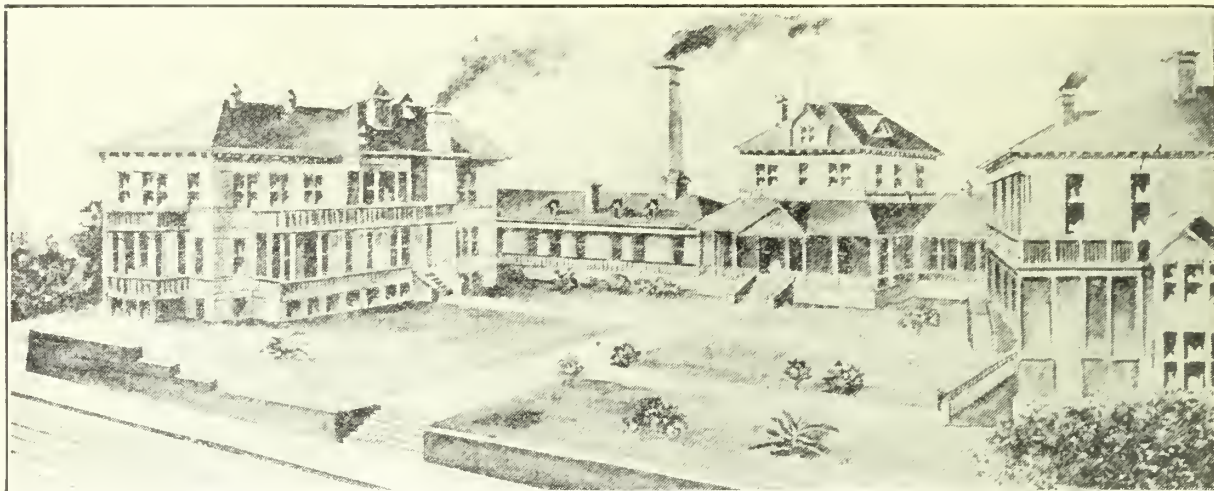
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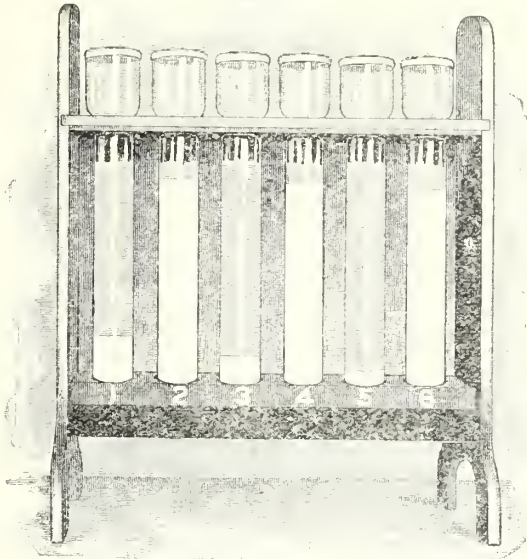
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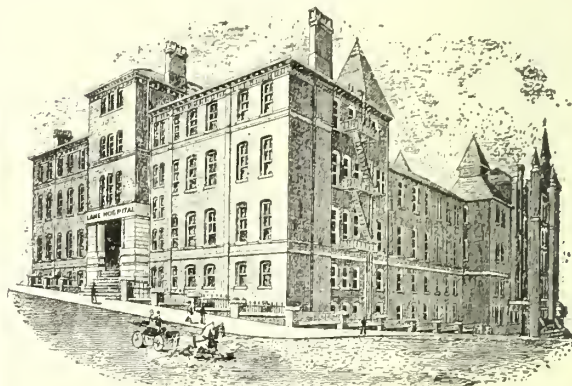
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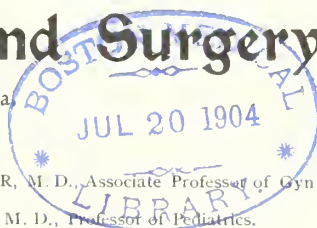
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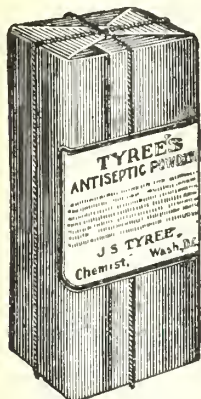
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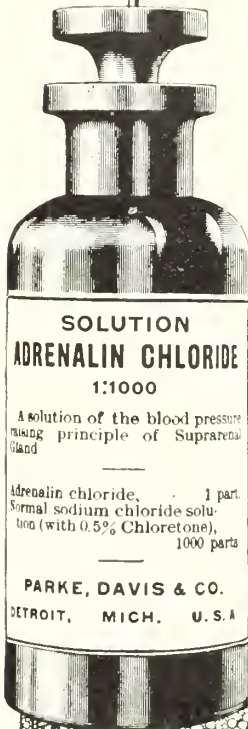
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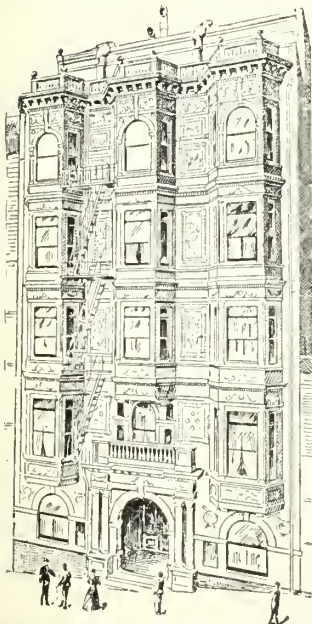
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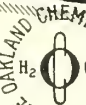
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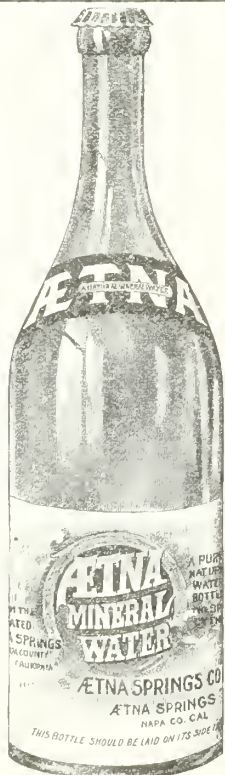
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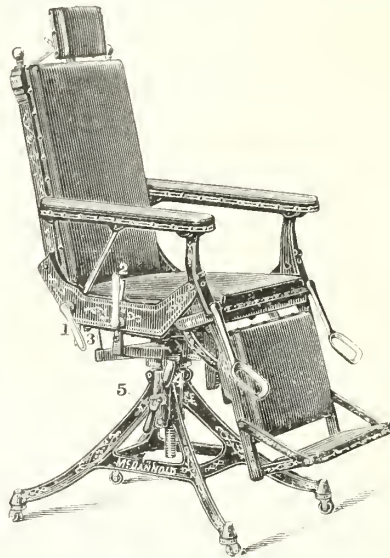
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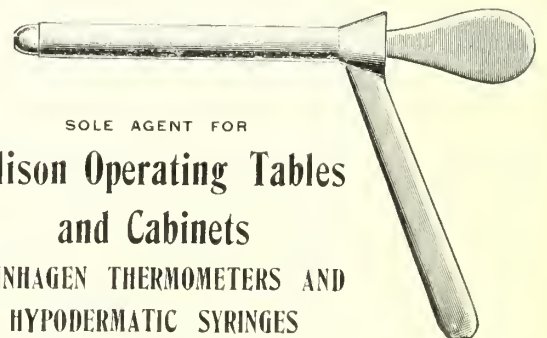
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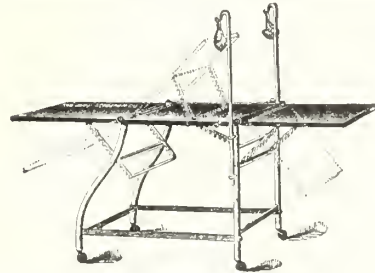
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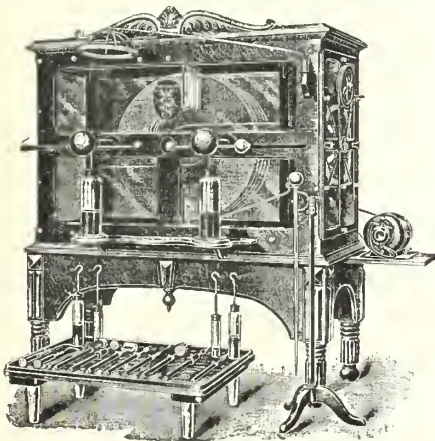
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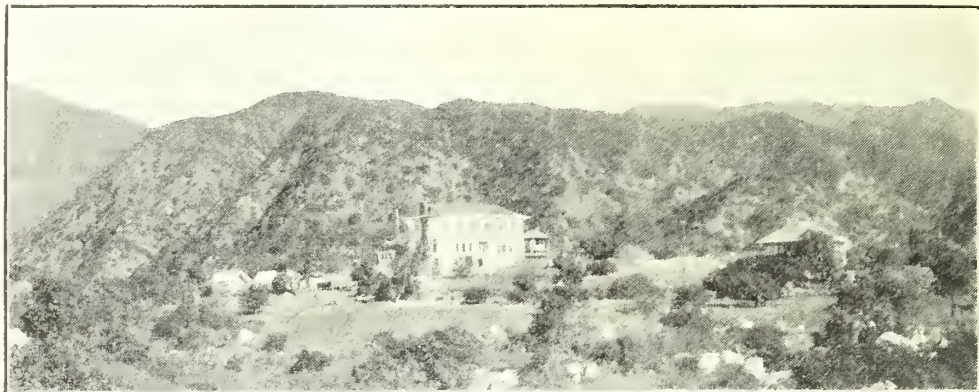
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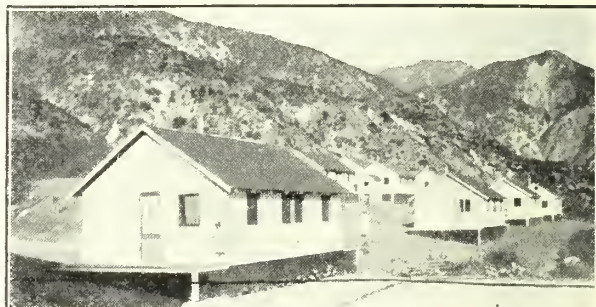
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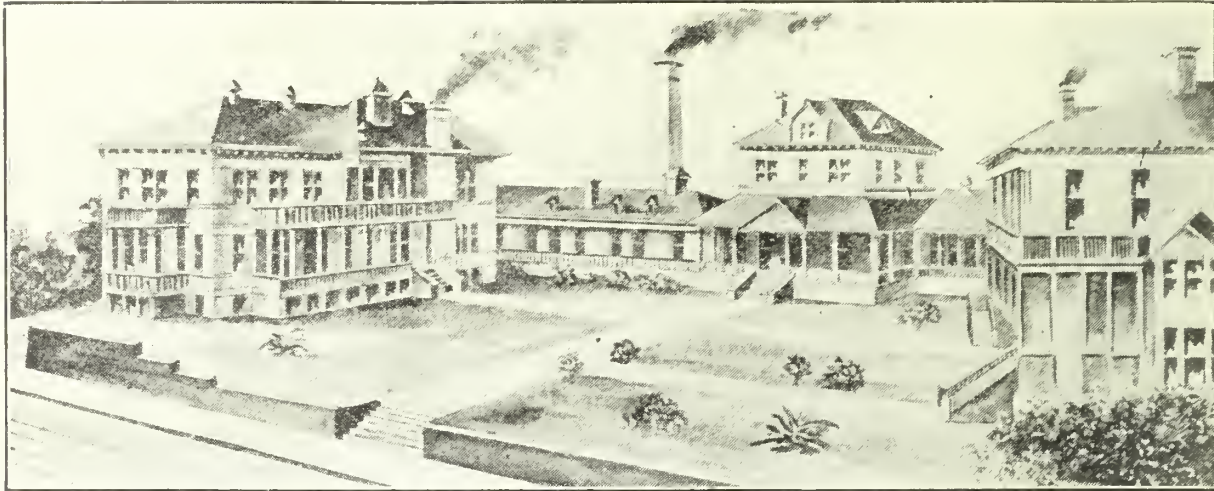
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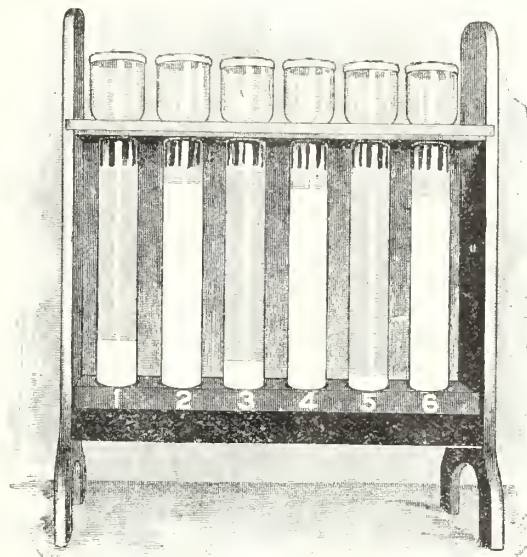
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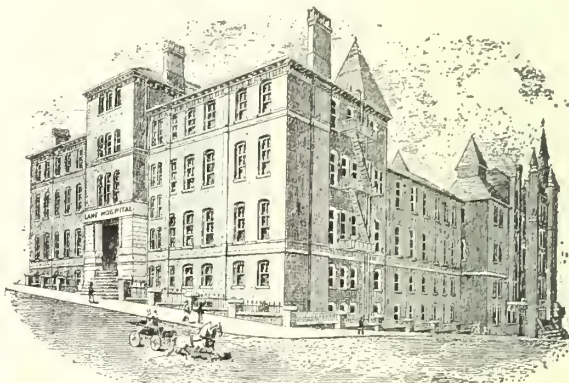
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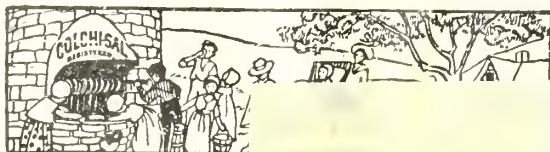
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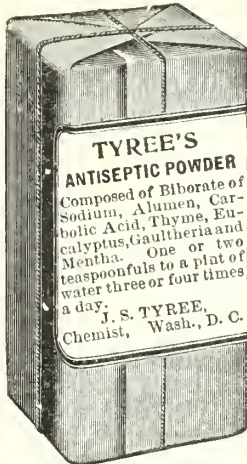
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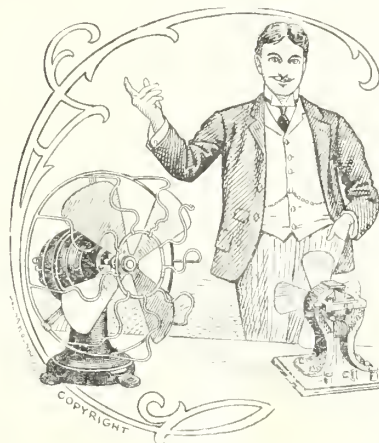
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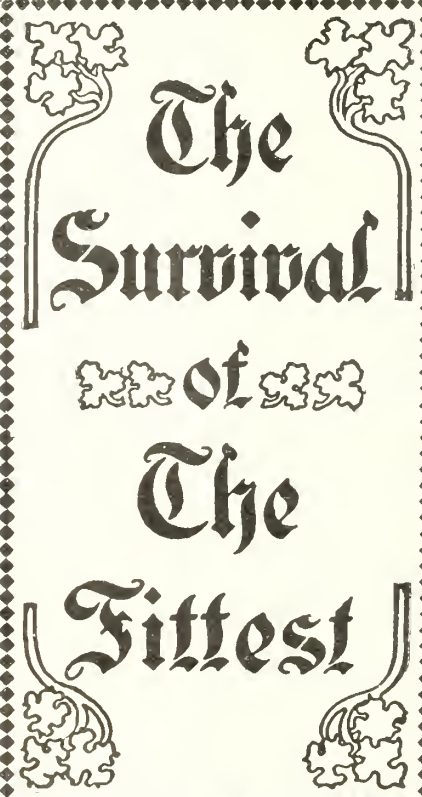
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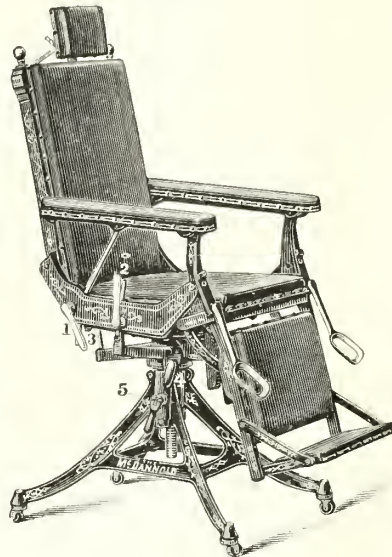
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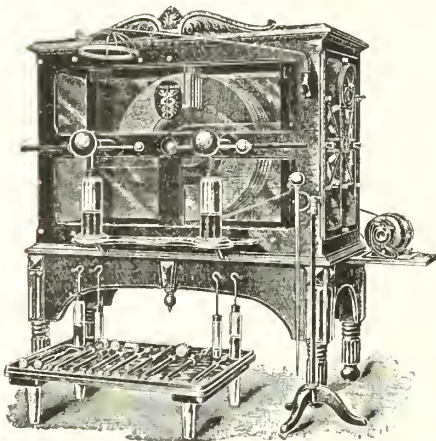
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Silicia.....	5.245	7.126	7.398	8.120	8.0793
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Boric Acid.....				0.470	undet.
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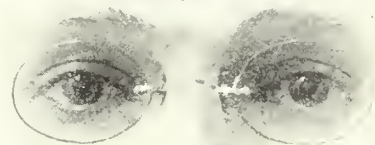
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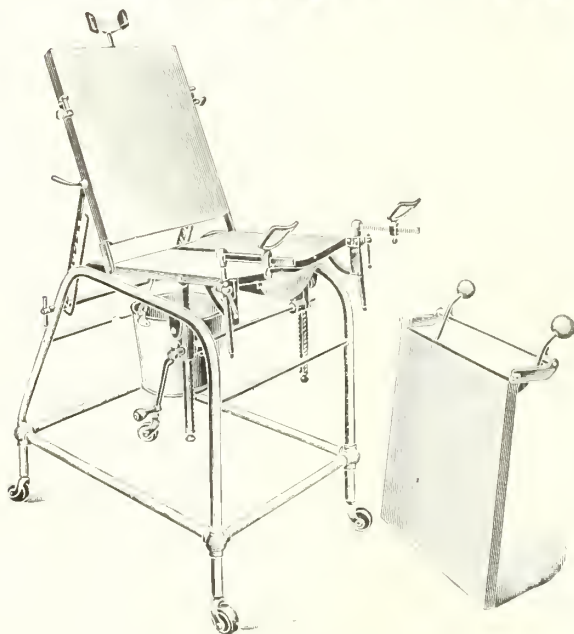
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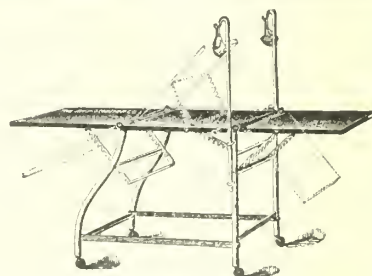
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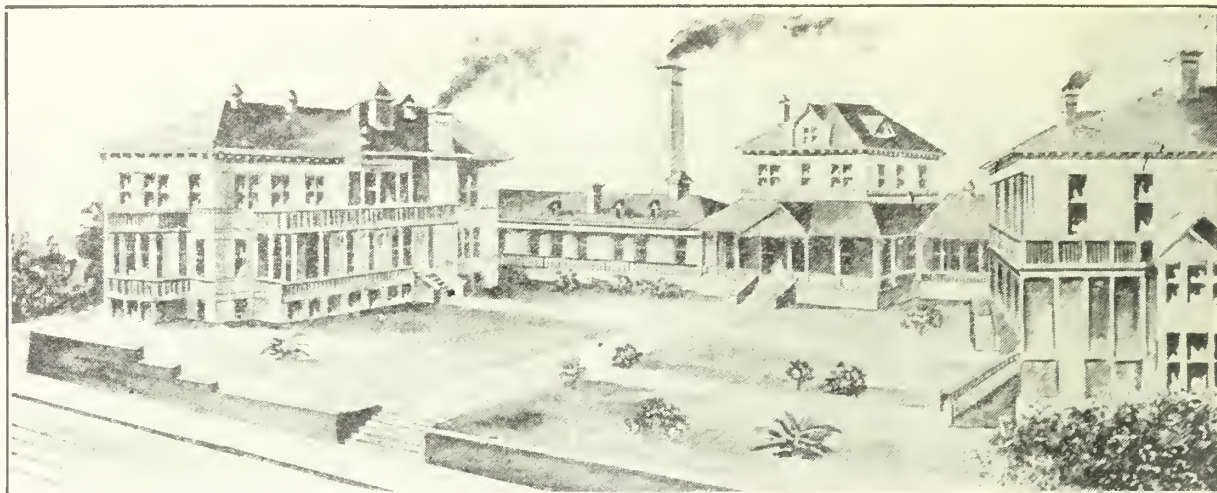
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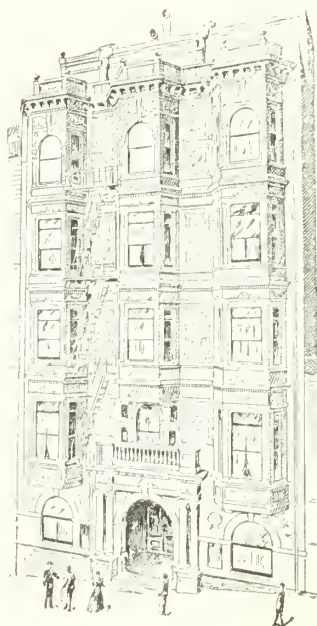


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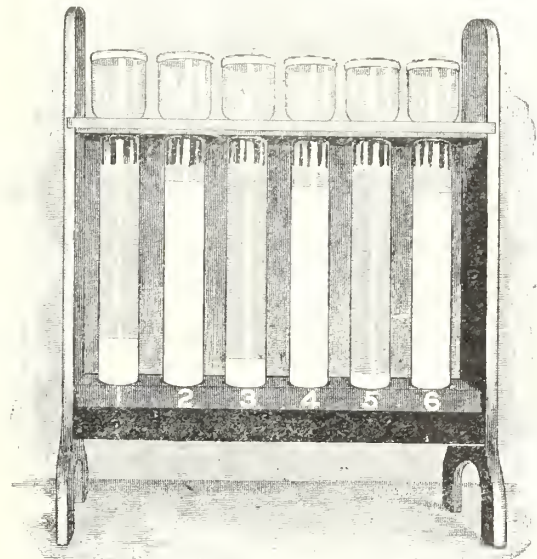
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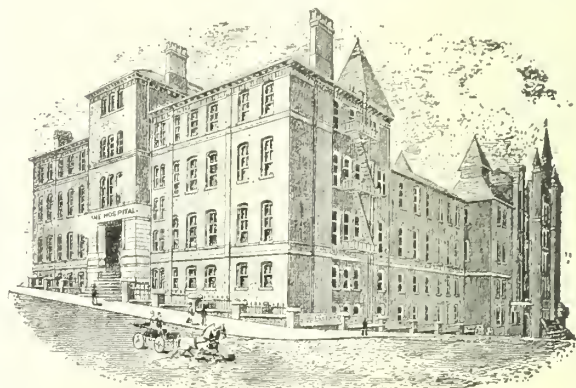
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Acid sulphurous	none
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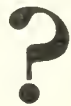
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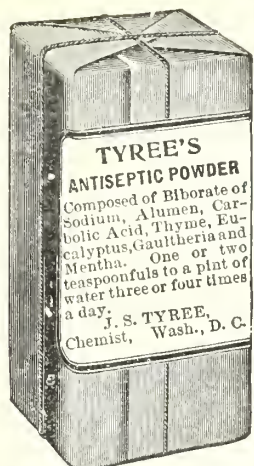
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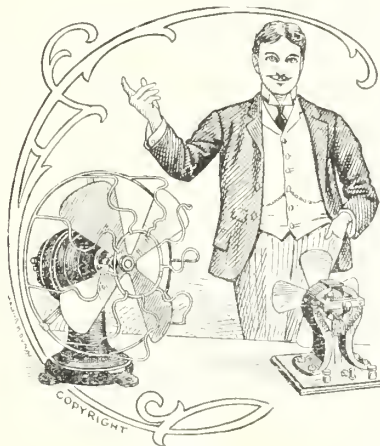
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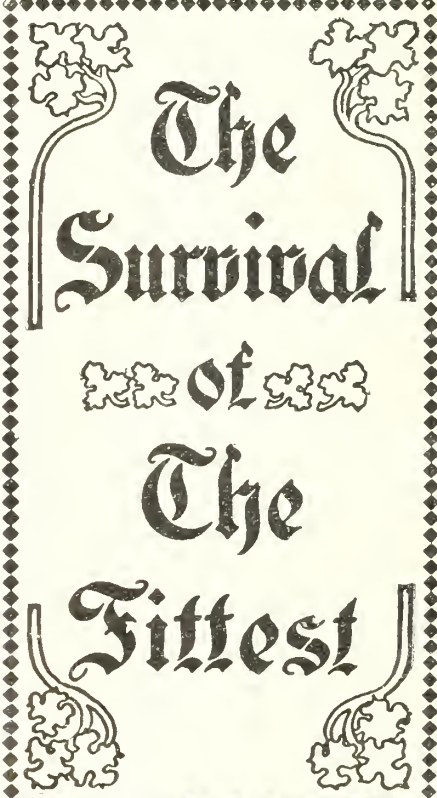
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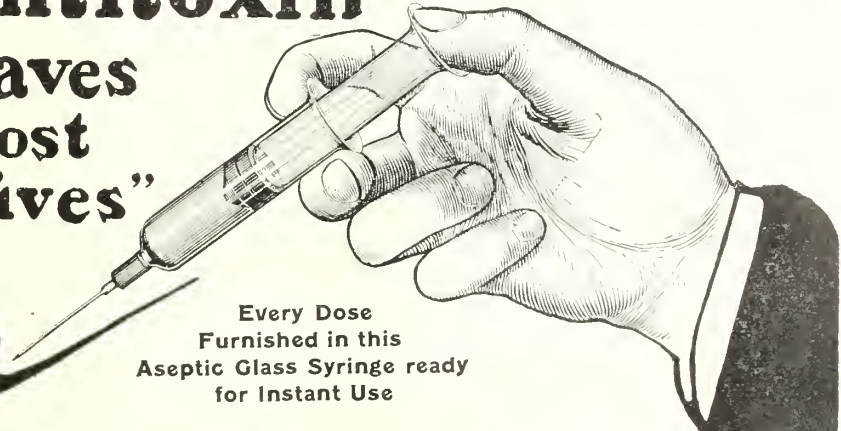
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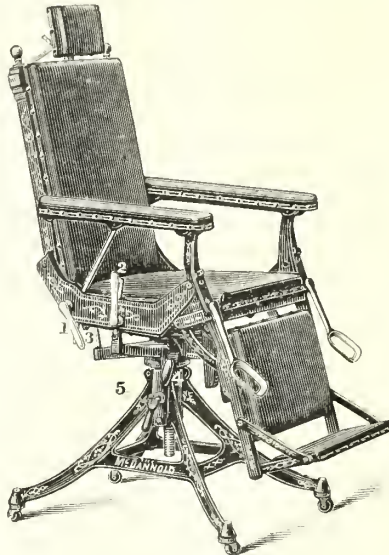
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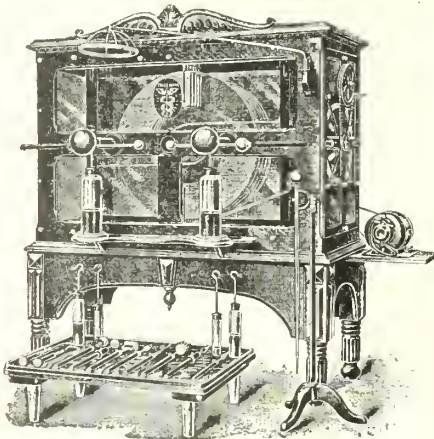
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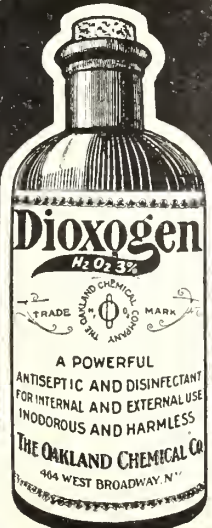
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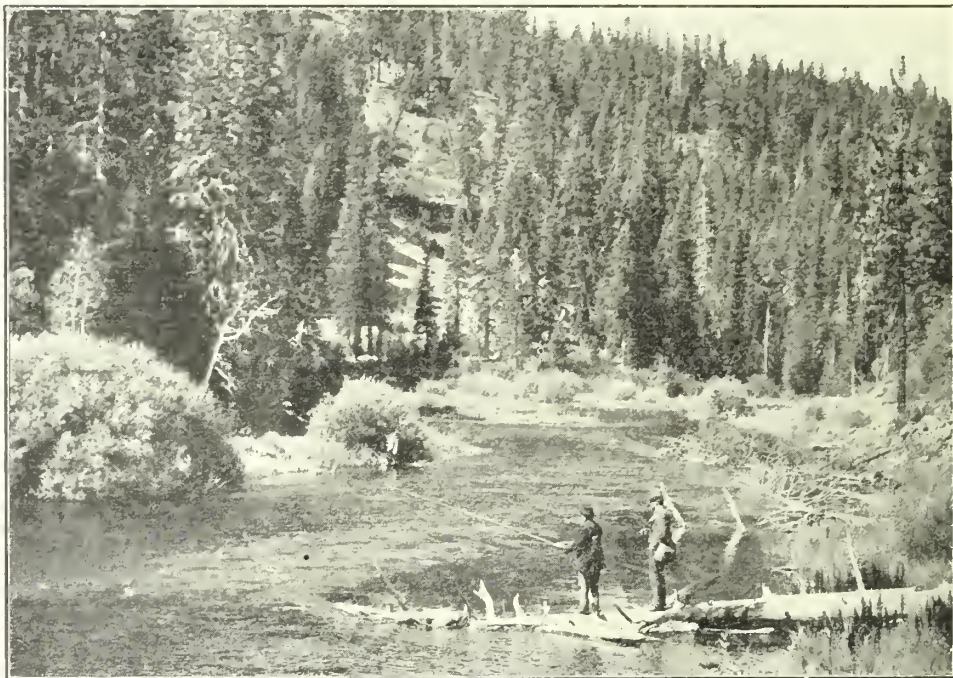
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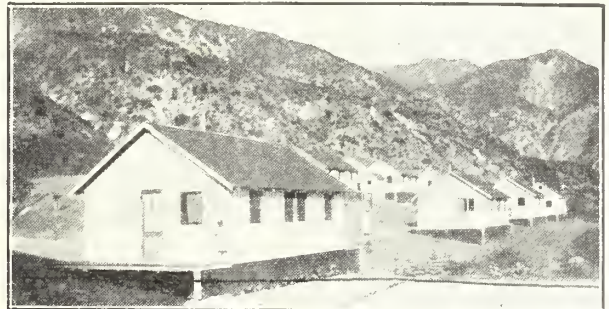
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Sodium Bi-Carbonate..... 1.055	Boric Acid (with spectro- scope)..... traces
Lithium (with spectroscopy) traces	Organic matter..... traces
Calcium Carbonate (dissolved in Carbonic Acid)..... 30.141	
Calcium Phosphate..... .494	Total, 43.349
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Bicarbonate of Magnesia.....	31.872	67.634	70.243	89.870	78.950
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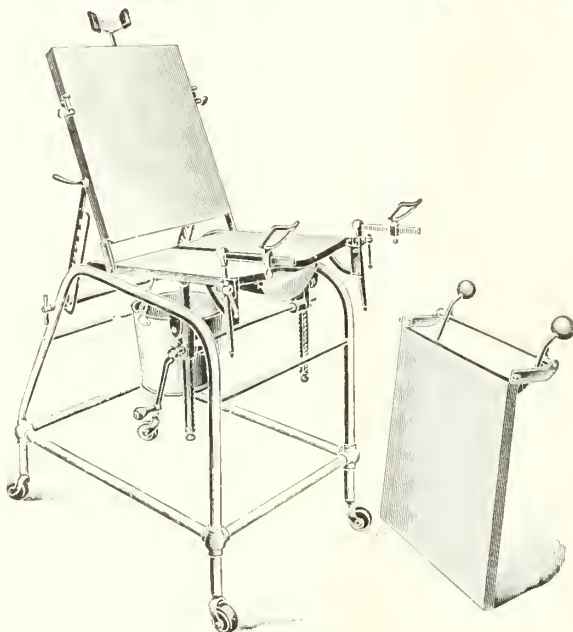
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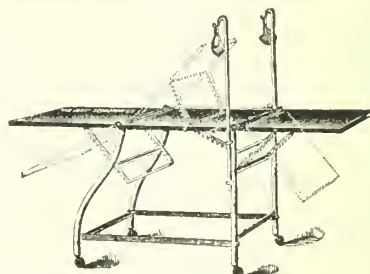
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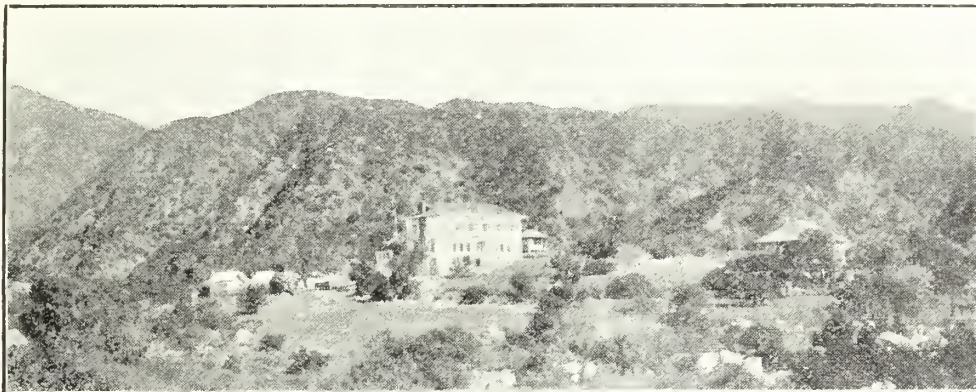
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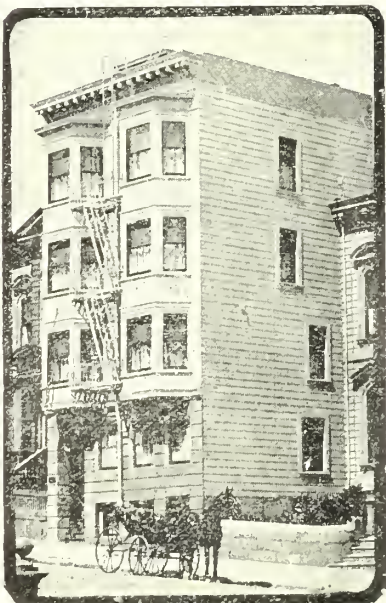
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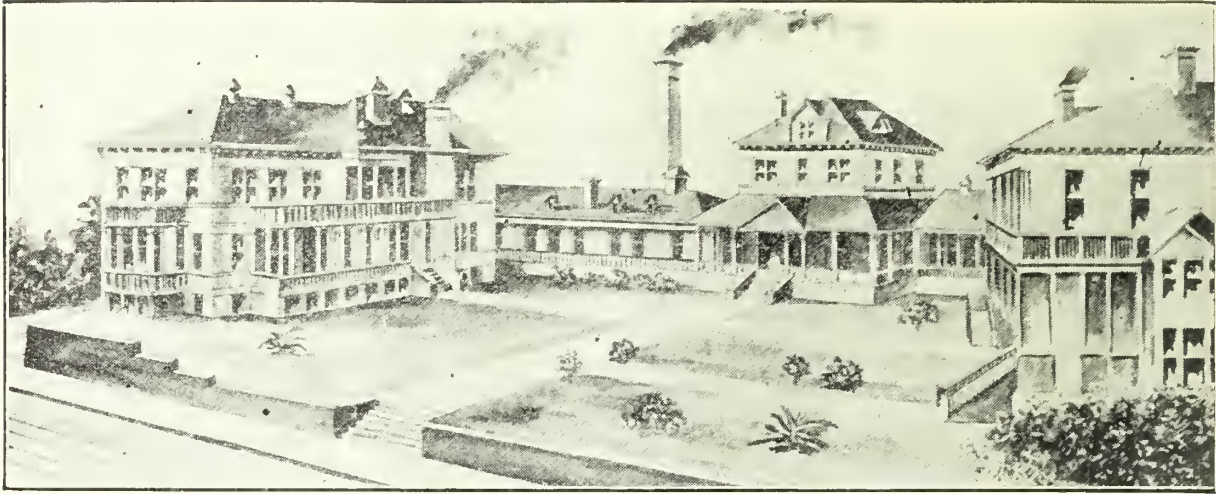
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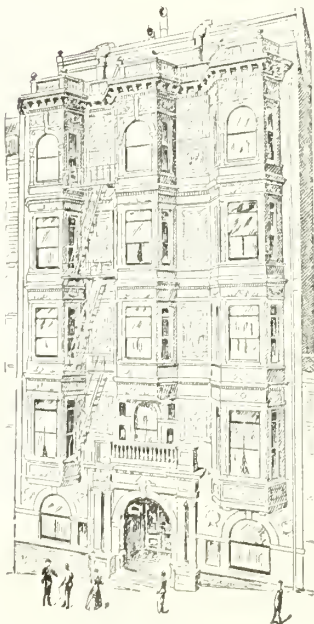


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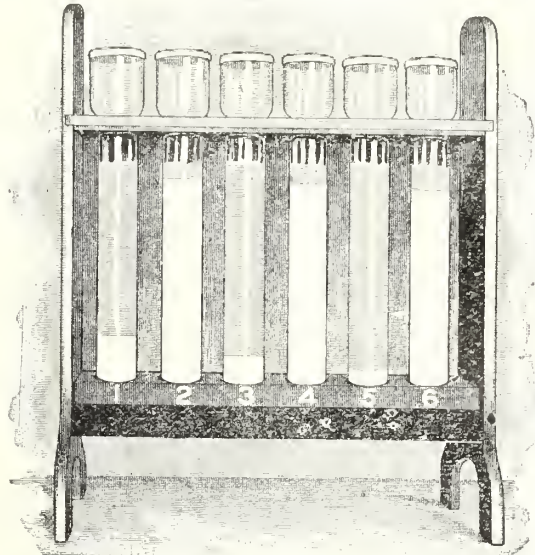
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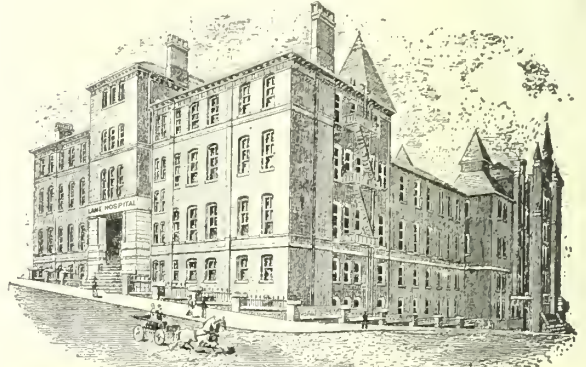
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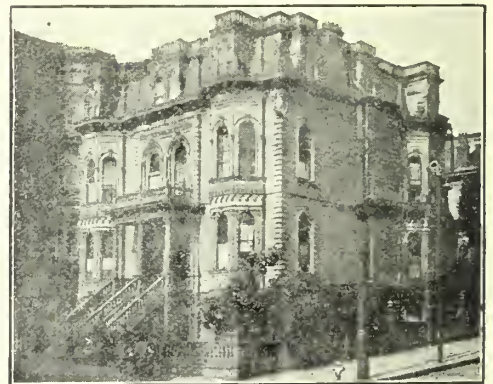
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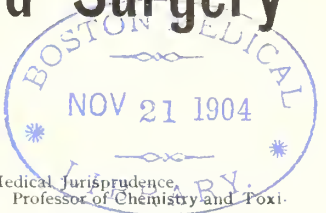
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Tartrate, in grams, per litre	1.85
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CALIFORNIA STATE JOURNAL OF MEDICINE

Y. M. C. A. BUILDING, SAN FRANCISCO

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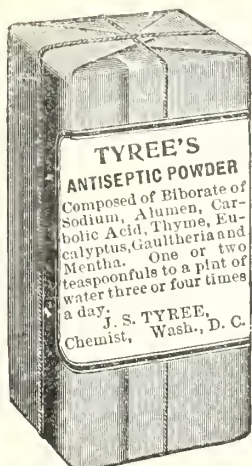
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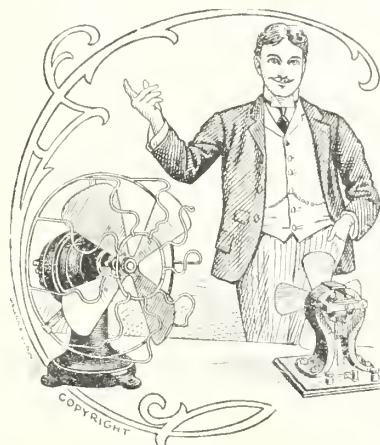
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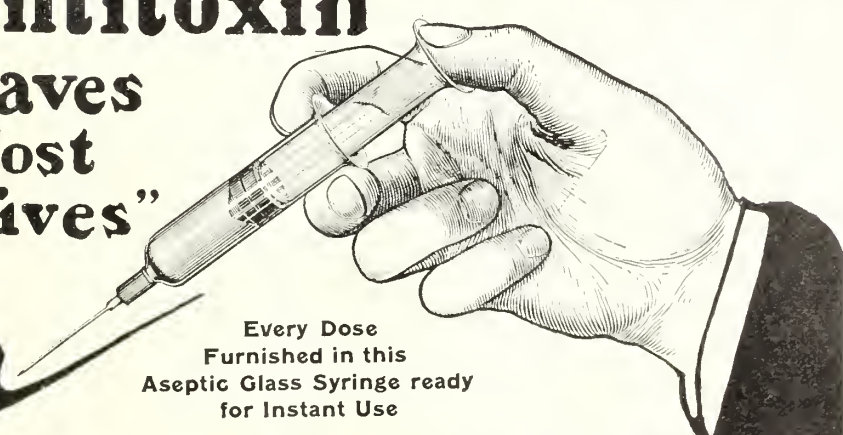
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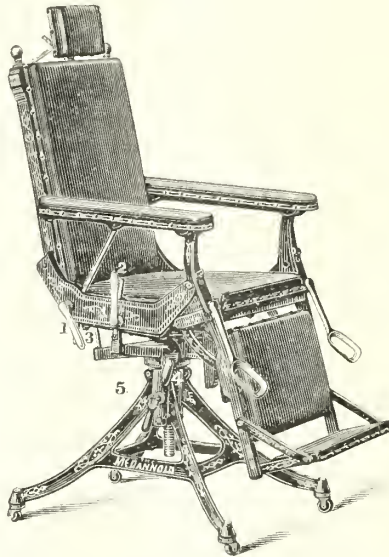
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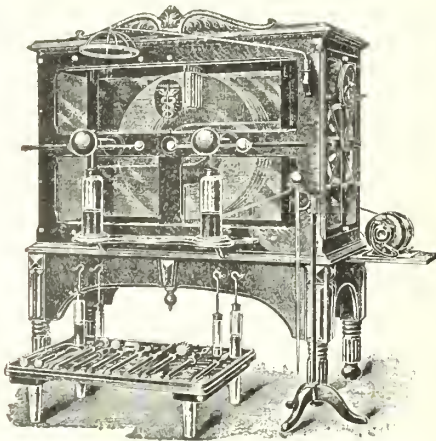
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NAME	PRESIDENT	SECRETARY	MEETS
Alameda County Med. Association.....	Jeremiah Maher, Oakland.....	A. H. Pratt, Oakland.....	Second Tuesday
Butte County Medical Society.....	O. Stansbury, Chico.....	D. H. Moulton, Chico.....	First Monday, E. O. M
Contra Costa Medical Society.....	J. T. Brennenman, Martinez.....	J. S. Riley, Port Costa.....	First Tuesday
Fresno County Medical Society.....	Geo. A. Hare, Fresno.....	Angus B. Cowan, Fresno.....	Second Tuesday
Humboldt County Med. Society.....	G. W. McKinnon, Arcata.....	G. N. Drysdale, Eureka.....	Second Monday
Kern County Medical Society.....	T. W. Helm, Bakersfield.....	Wm. S. Fowler, Bakersfield.....	First and third Friday
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	First Saturday
Los Angeles County Med. Society.....	W. W. Beckett, Los Angeles.....	Jos. M. King, Los Angeles.....	Quarterly
Marin County Medical Society.....	W. F. Jones, San Rafael.....	W. J. Wickman, San Rafael.....	First Thursday
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	W. N. Moore, Ukiah.....	First Saturday
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	Quarterly
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Dorus Brumwell, King City.....	First Thursday
Napa County Medical Society.....	D. E. Osborne, St. Helena.....	J. L. Arbogast, St. Helena.....	First Saturday
Orange County Medical Assn.....	F. E. Wilson, Westminster.....	H. S. Gordon, Santa Ana.....	Quarterly
Placer County Medical Society.....	Thomas M. Todd, East Auburn.....	R. F. Rooney, Auburn.....	Second Tuesday
Riverside County Medical Society.....	C. W. Girdlestone, Riverside.....	H. R. Martin, Riverside.....	March '04
Sacramento Society for Med. Imp.....	A. M. Henderson, Sacramento.....	J. W. James, Sacramento.....	Third Tuesday
San Benito County Medical Society.....	James H. Tebbetts, Hollister.....	J. M. O'Donnell, Hollister.....	First Monday
San Bernardino Medical Assn.....	James P. Booth, Needles.....	Chas. S. Harris, San Bernardino.....	Second Wednesday
San Diego County Medical Society.....	Fred Baker, San Diego.....	T. L. Magee, San Diego.....	First Friday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	Wm. F. Barbat, San Francisco.....	Second Tuesday
San Joaquin County Med. Society.....	D. F. Ray, Stockton.....	Barton J. Powell, Stockton.....	Last Friday
San Luis Obispo County Med. Soc.....	J. S. Jackson, San Luis Obispo.....	J. J. Knowlton, San Luis Obispo.....	
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	W. B. Cunnane, Santa Barbara.....	Third Wednesday
Santa Clara County Med. Society.....	J. T. Harris, San Jose.....	F. H. Paterson, San Jose.....	Quarterly
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	Saxton T. Pope, Watsonville.....	Quarterly
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	R. F. Wallace, Redding.....	Second Thursday
Sonoma County Medical Society.....	J. W. Jesse, Santa Rosa.....	G. W. Mallory, Santa Rosa.....	
Tri-County Medical Society.....	P. K. Watters, Watsonville.....	S. T. Pope, Watsonville.....	
Ventura County Medical Society.....	I. H. Love, Ventura.....	A. A. Maulhardt, Oxnard.....	First Monday
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	F. R. Fairchilds, Woodland.....	
Yuba and Sutter Cos. Medical Soc.....	J. H. Barr, Marysville.....	G. W. Stratton, Marysville.....	Quarterly

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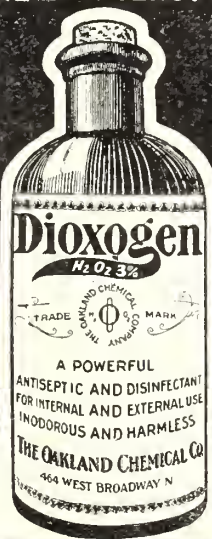
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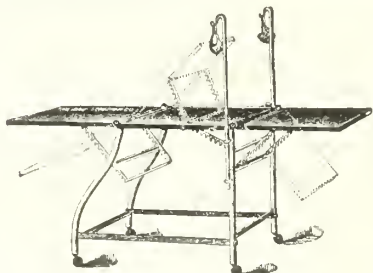
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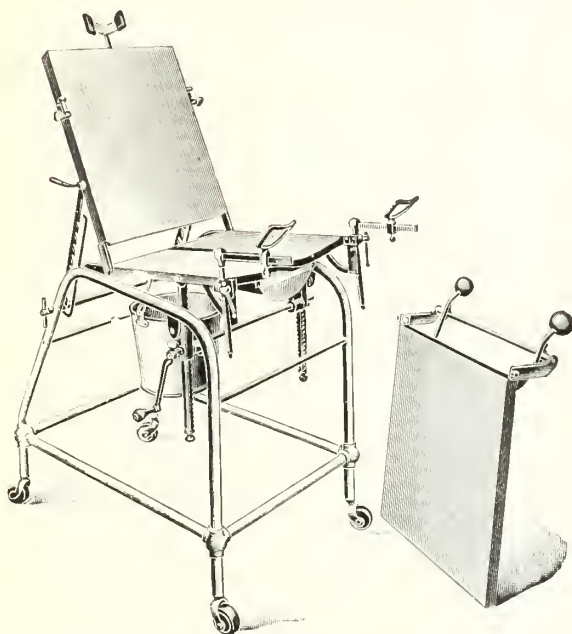
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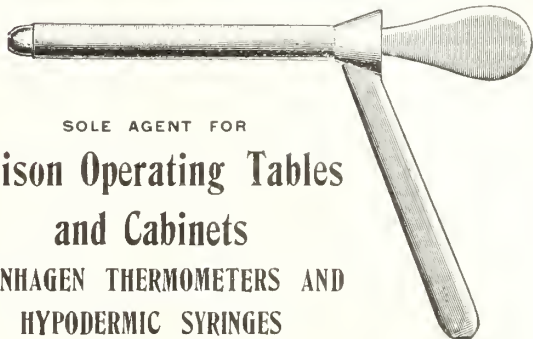
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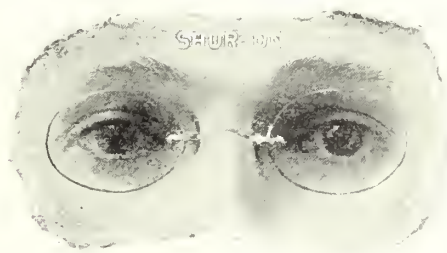
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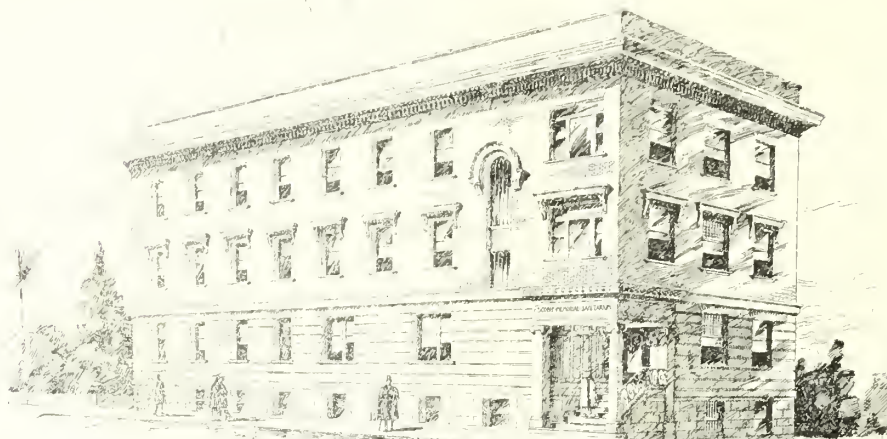
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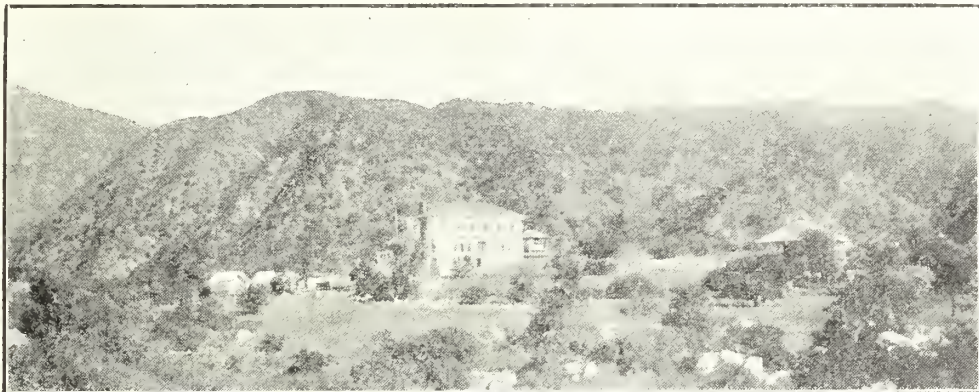
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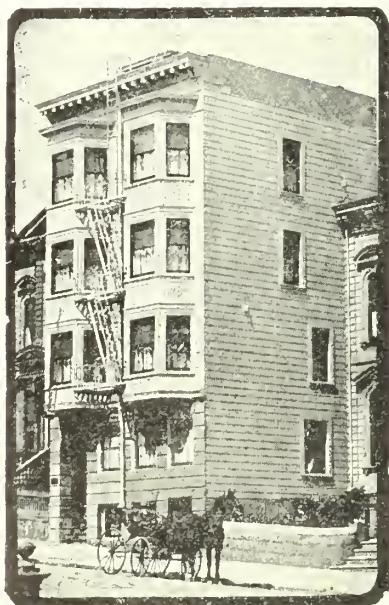
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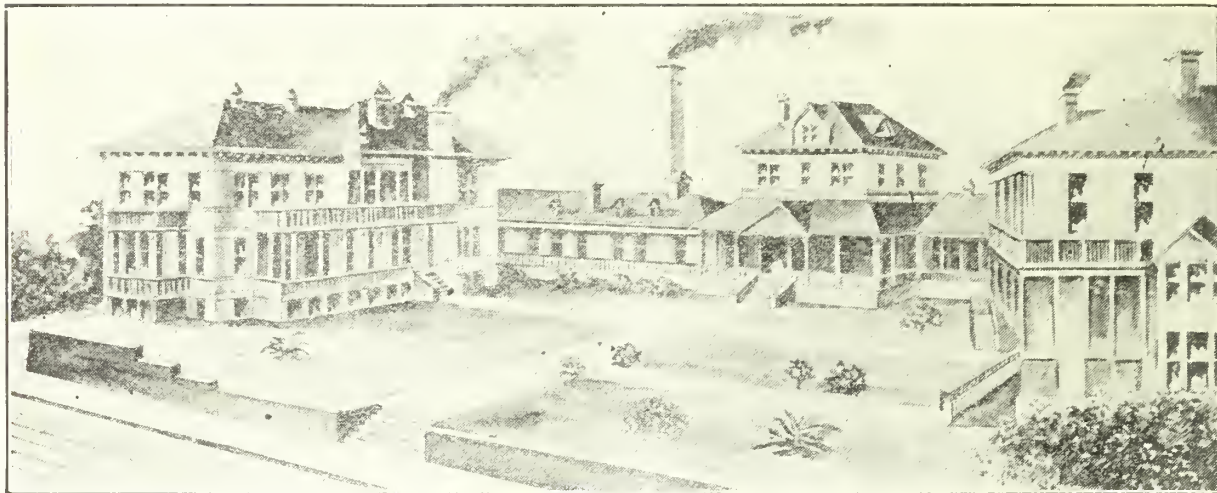
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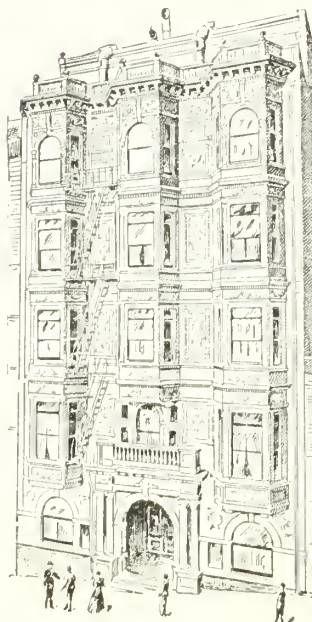
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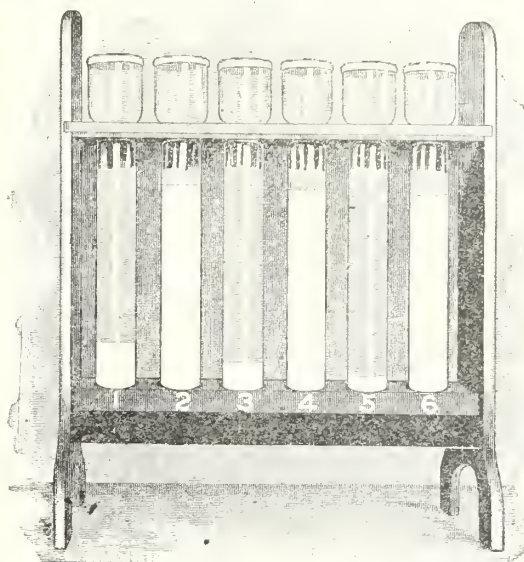
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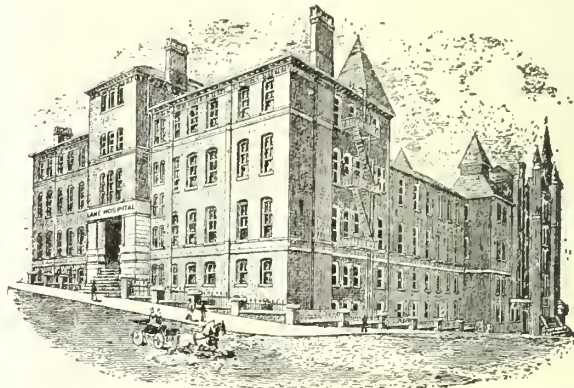
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Editorial.

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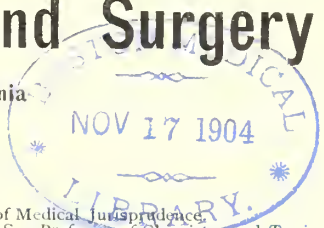
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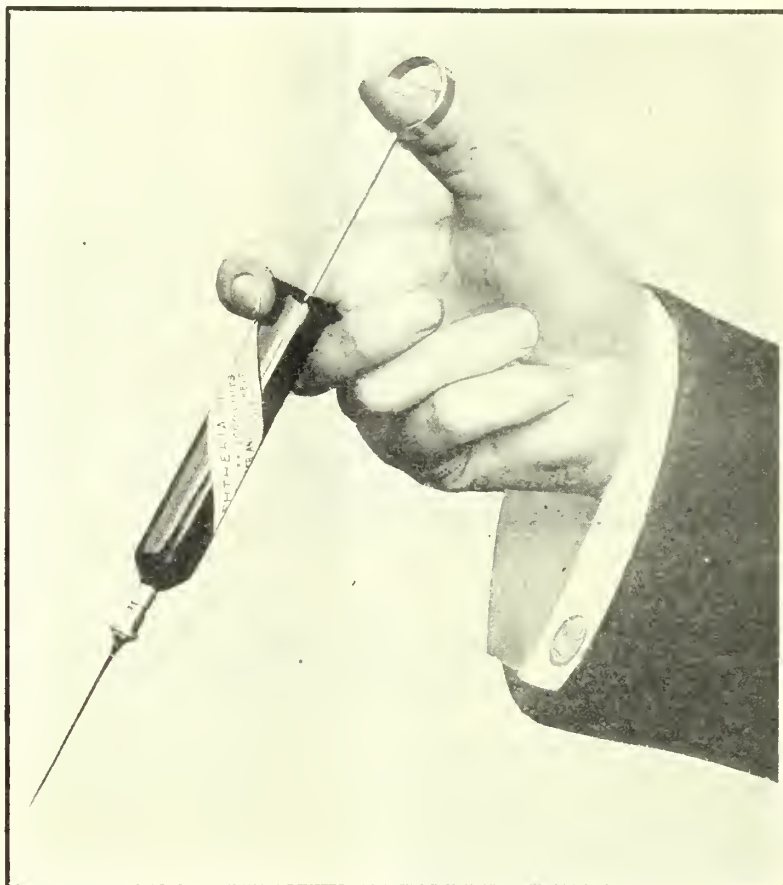
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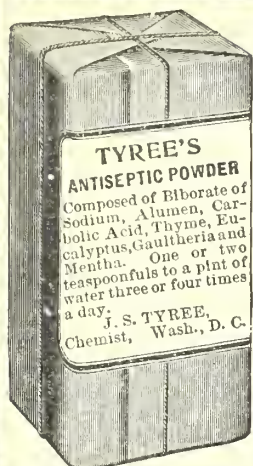
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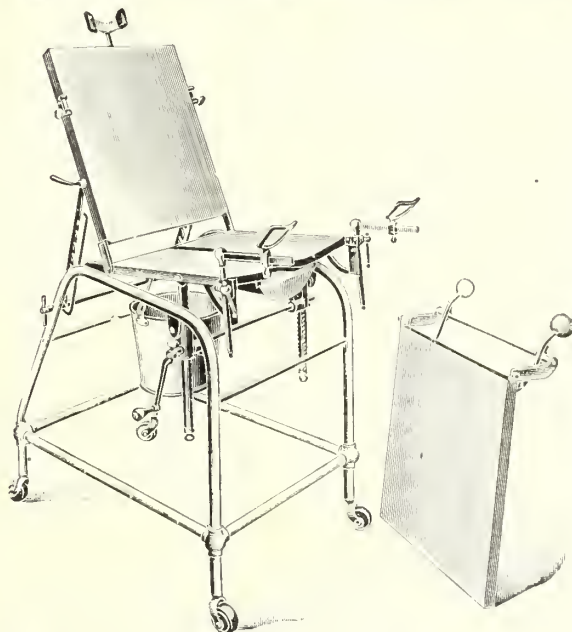
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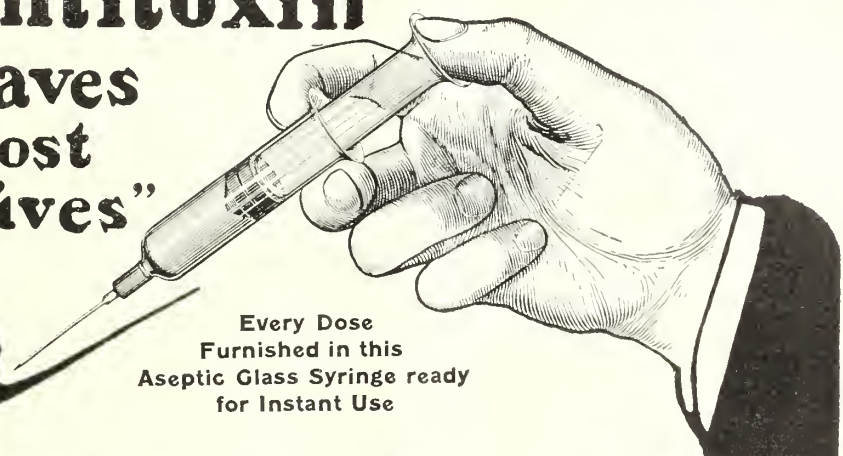
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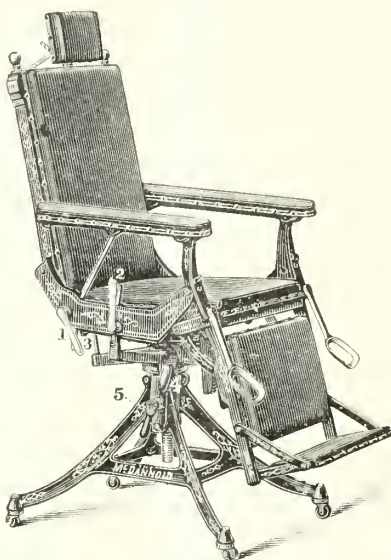
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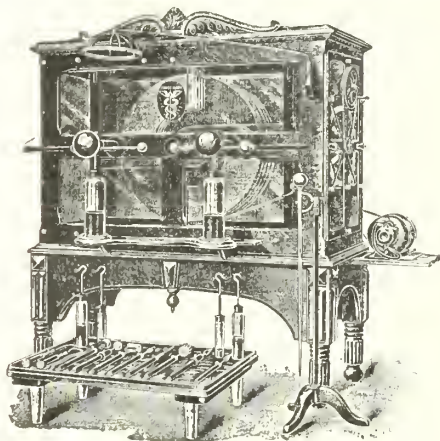
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Contra Costa Medical Society.....	J. T. Brenneman, Martinez.....	J. S. Riley, Port Costa.....	First Monday, E. O. M.
Fresno County Medical Society.....	L. L. Martin, Fresno.....	Angus B. Cowan, Fresno.....	First Tuesday
Humboldt County Med. Society.....	G. W. McKinnon, Arcata.....	G. N. Drysdale, Eureka.....	Second Tuesday
Kern County Medical Society.....	T. W. Helm, Bakersfield.....	Wm. S. Fowler, Bakersfield.....	
Kings County Medical Society.....	N. P. Duncan, Hanford.....	L. E. Felton, Hanford.....	Second Monday
Los Angeles County Med. Society.....	W. W. Beckett, Los Angeles.....	Jos. M. King, Los Angeles.....	First and third Friday
Marin County Medical Society.....	W. J. Wickman, San Rafael.....	W. F. Jones, San Rafael.....	First Saturday
Mendocino Co. Med. Society.....	E. W. King, Talmage.....	W. N. Moore, Ukiah.....	Quarterly
Merced County Medical Society.....	Edw. S. O'Brien, Merced.....	Walter E. Lilley, Merced.....	First Thursday
Monterey County Medical Society.....	Thos. C. Edwards, Salinas.....	Dorus Brunnell, King City.....	First Saturday
Napa County Medical Society.....	D. E. Osborne, St. Helena.....	J. L. Arbogast, St. Helena.....	Quarterly
Orange County Medical Assn.....	F. E. Wilson, Westminster.....	H. S. Gordon, Santa Ana.....	Second Tuesday
Placer County Medical Society.....	Thomas M. Todd, East Auburn.....	R. F. Rooney, Auburn.....	March '04
Riverside County Medical Society.....	C. W. Girdlestone, Riverside.....	H. R. Martin, Riverside.....	Third Tuesday
Sacramento Society for Med. Imp.....	A. M. Henderson, Sacramento.....	J. W. James, Sacramento.....	Third Saturday
San Benito County Medical Society.....	James H. Tebbetts, Hollister.....	J. M. O'Donnell, Hollister.....	First Monday
San Bernardino Medical Assn.....	Chas. C. Browning, Highlands.....	Chas. S. Harris, San Bernardino.....	Second Wednesday
San Diego County Medical Society.....	P. J. Parker, San Diego.....	T. L. Magee, San Diego.....	First Friday
San Francisco County Med. Society.....	J. Rosenstirn, San Francisco.....	Wm. F. Barbat, San Francisco.....	Second Tuesday
San Joaquin County Med. Society.....	D. F. Ray, Stockton.....	Barton J. Powell, Stockton.....	Last Friday
San Luis Obispo County Med. Soc.....	P. S. Jackson, San Luis Obispo.....	J. J. Knowlton, San Luis Obispo.....	
Santa Barbara County Med. Assn.....	Chas. Anderson, Santa Barbara.....	W. B. Cunnane, Santa Barbara.....	
Santa Clara County Med. Society.....	J. T. Harris, San Jose.....	F. H. Paterson, San Jose.....	Third Wednesday
Santa Cruz County Medical Society.....	Exeter P. Vaux, Santa Cruz.....	Saxton T. Pope, Watsonville.....	Quarterly
Shasta Co. Medical Society.....	O. J. Lawry, Redding.....	R. F. Wallace, Redding.....	Quarterly
Sonoma County Medical Society.....	J. W. Jesse, Santa Rosa.....	G. W. Mallory, Santa Rosa.....	Second Thursday
Tri-County Medical Society.....	P. K. Watters, Watsonville.....	S. T. Pope, Watsonville.....	
Ventura County Medical Society.....	J. H. Love, Ventura.....	A. A. Maulhardt, Oxnard.....	First Monday
Yolo County Society for Med. Imp.....	W. E. Bates, Davisville.....	F. R. Fairchild, Woodland.....	
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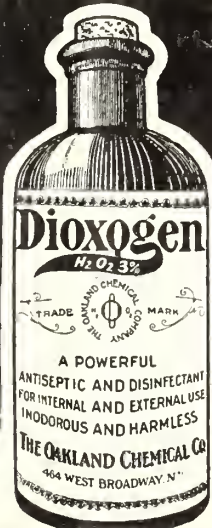
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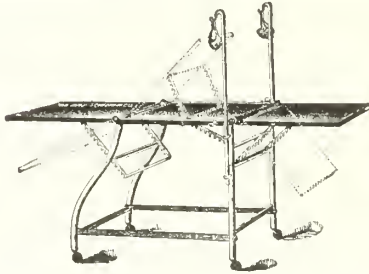
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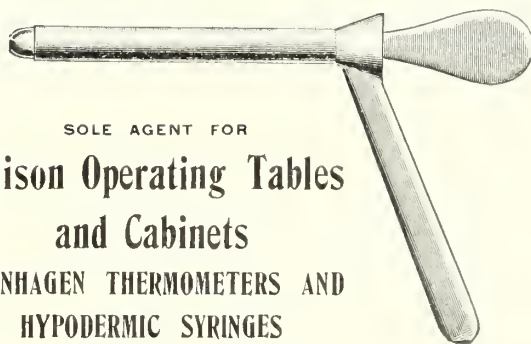
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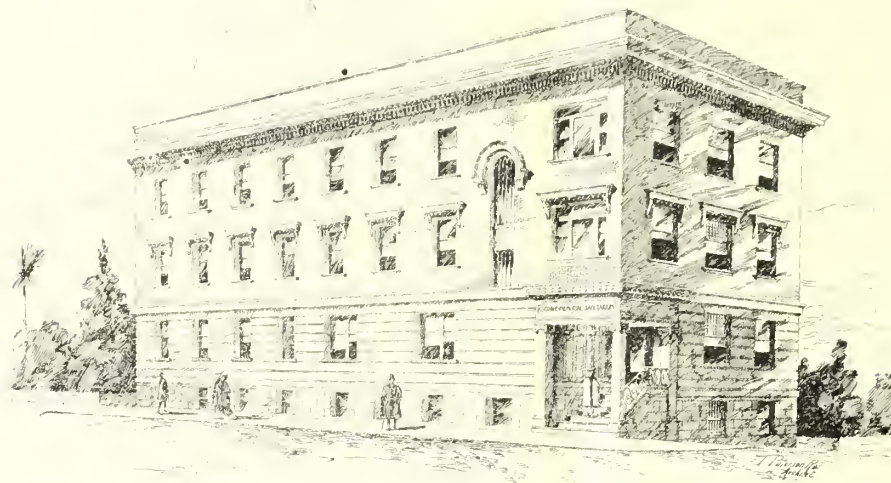
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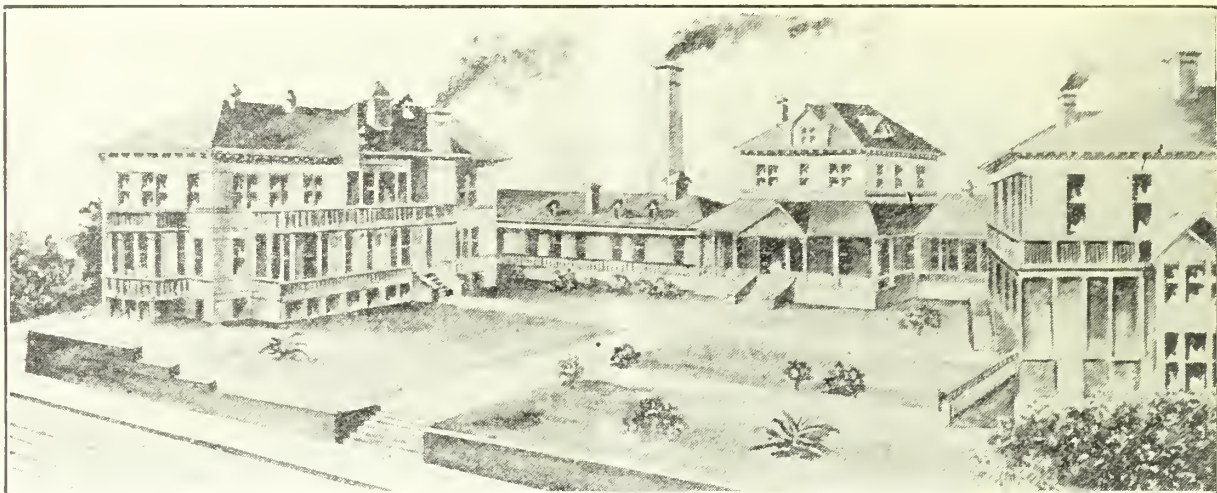
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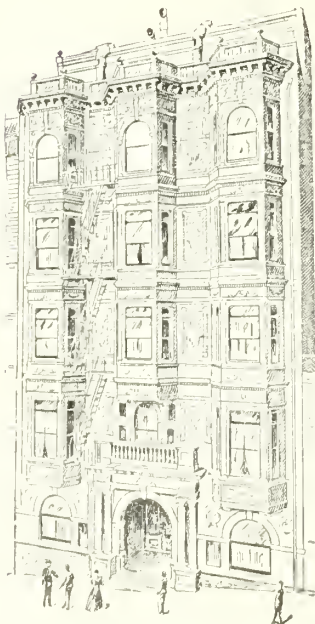
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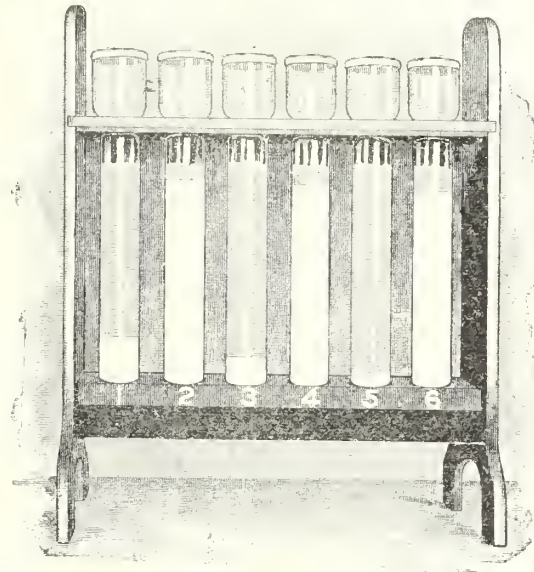
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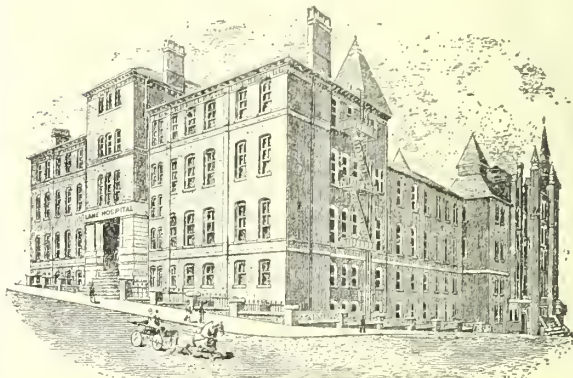
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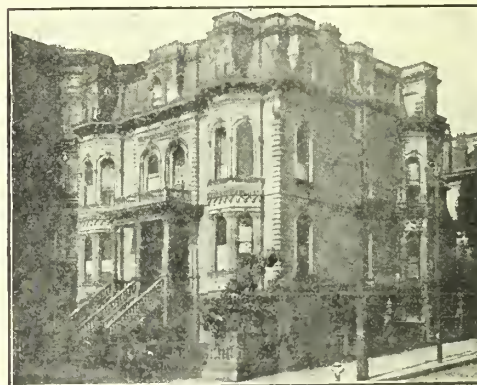
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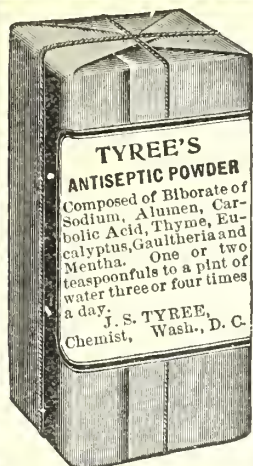
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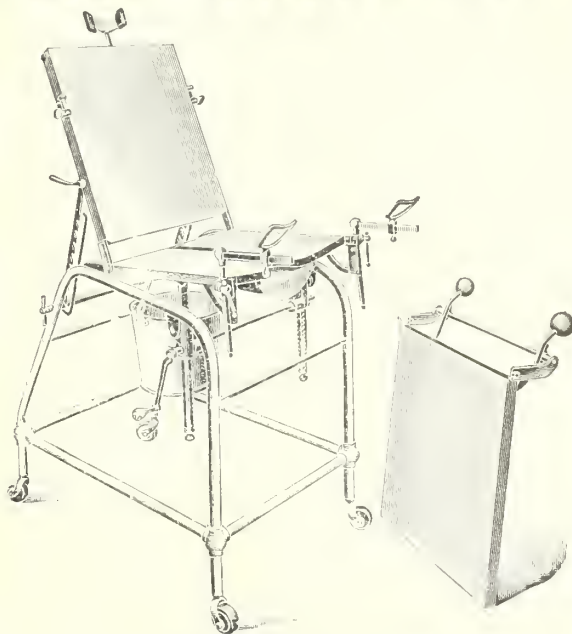
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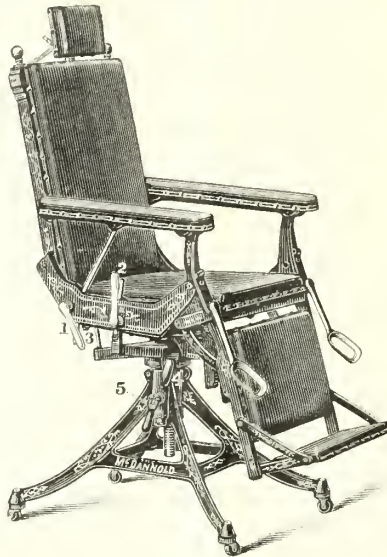
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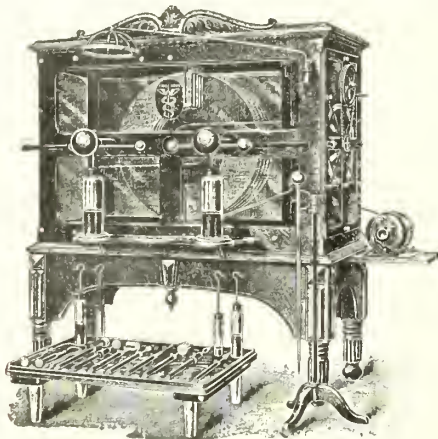
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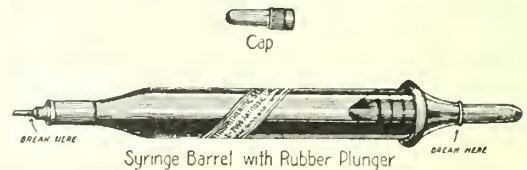
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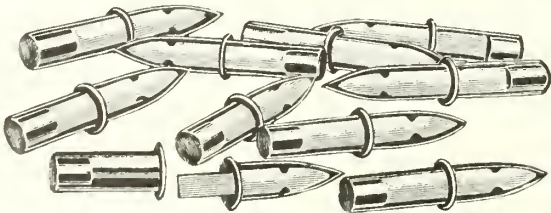
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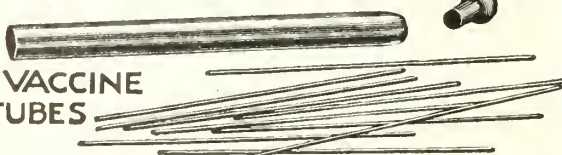
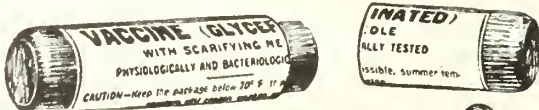
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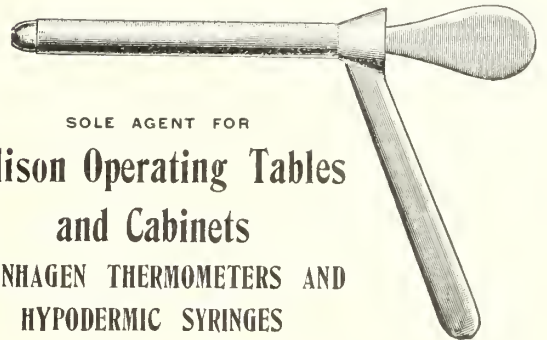
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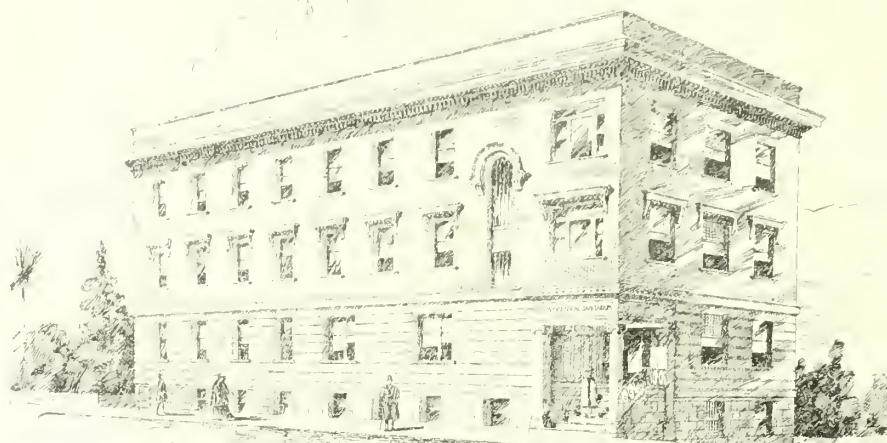
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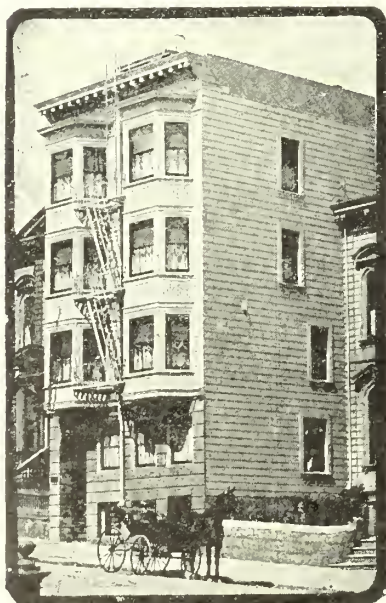
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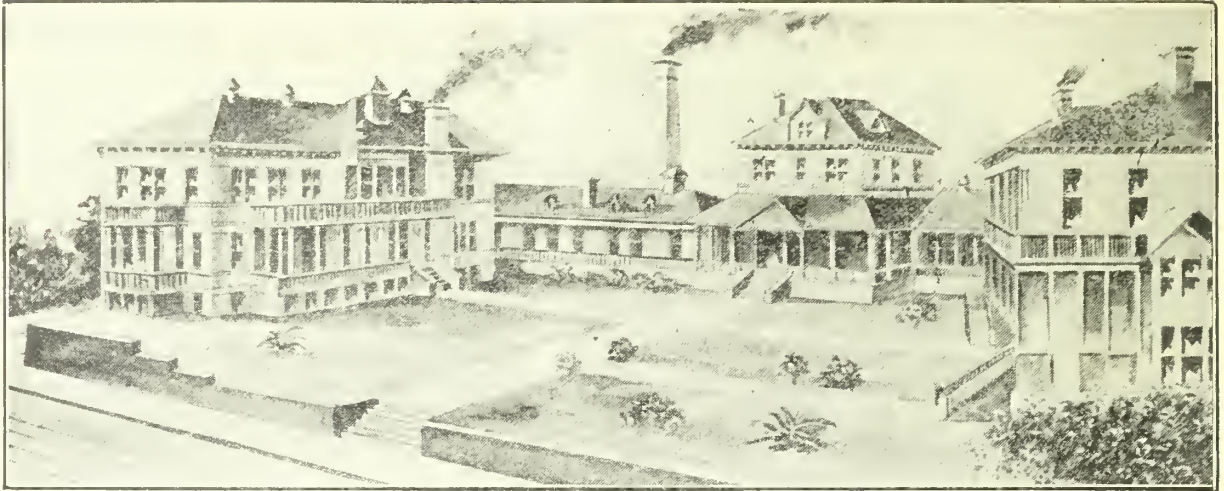
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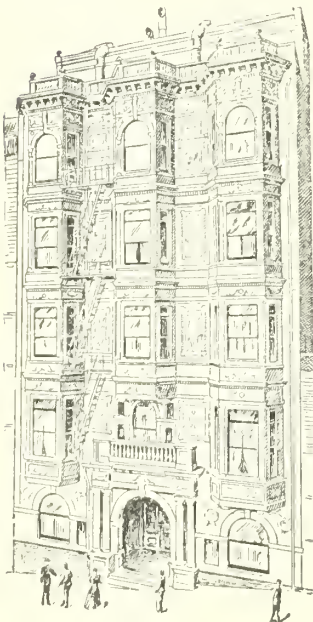
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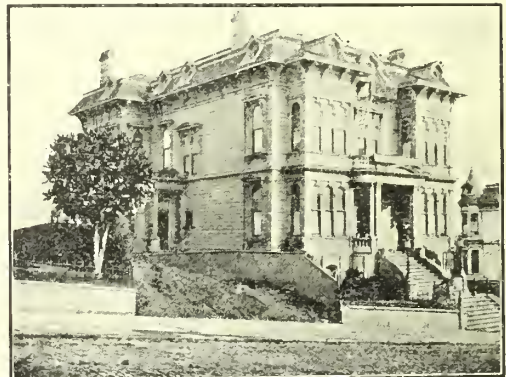
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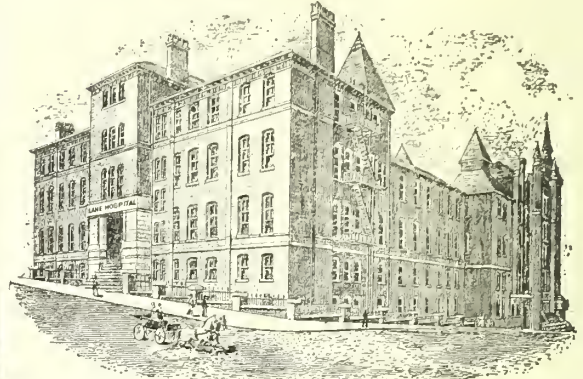
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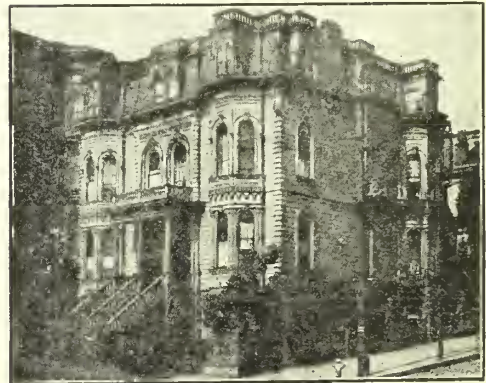
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